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A HISTORY OF ENGLISH FARMING

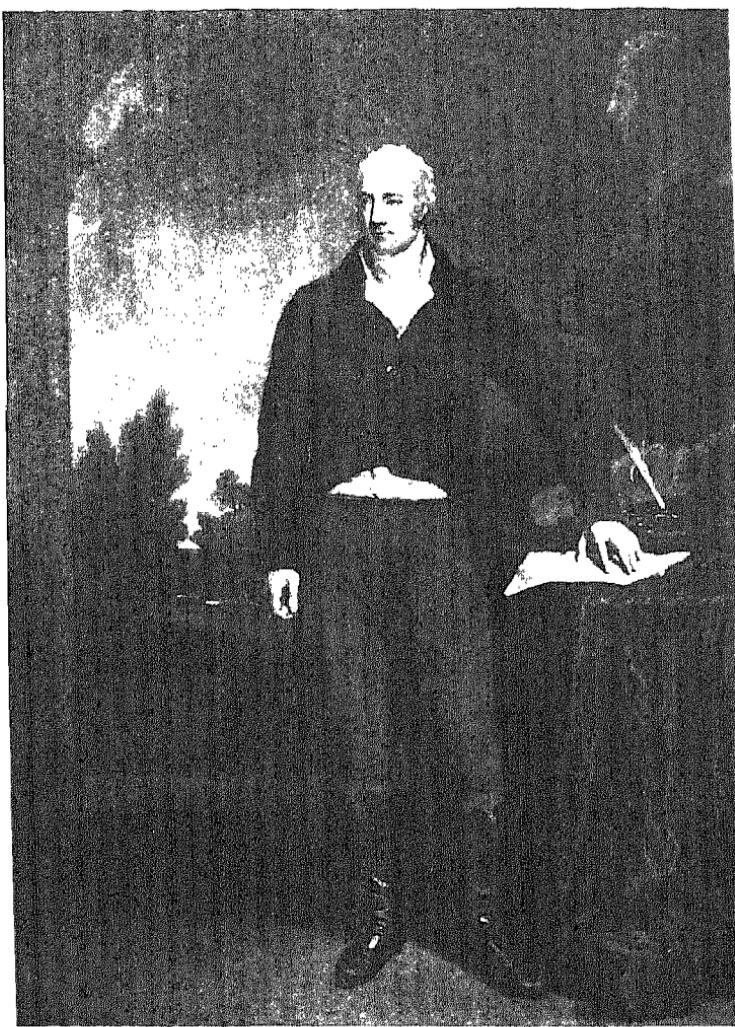


Plate I Thomas William Coke, 1752-1842  
By S. W. Reynolds, after J. Opie

# A HISTORY OF ENGLISH FARMING

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# A HISTORY OF ENGLISH FARMING

## CHAPTER I

### FARMING FOR SUBSISTENCE

#### THE EVOLUTION OF FOOD PRODUCTION

THE history of farming is largely the history of mankind. Food and raiment are the only things essential to human existence, and a study of the political history even of modern states shows how much it is influenced and controlled by the need for food. Little is known, of course, about the food supplies of primitive man, but a good deal has been conjectured from the slight evidence that the archaeologists have uncovered. Here and there, too, in some parts of the world, primitive communities have existed in modern times, and may still be found, living under pre-farming conditions, and dependent entirely upon Nature, unaided, for their food supplies. We see man, raised not far above the animal, getting his living by collecting the edible parts of wild plants, the smaller animals and the larger insects. As a nomad, he could meet his needs, moving on to fresh hunting grounds as supplies became scarce. The diet cannot have been very varied or plentiful, but at least he did not know the famines and shortages which were the common experience of more civilized communities attempting to control Nature, and to direct her into more bountiful ways.

The domestication of animals and the cultivation of the soil were the first great advances towards settled community life. From contemporary evidence, again, supplied by living races of mankind, it seems probable that the taming of animals preceded attempts to cultivate the soil. It is a safe assumption that many attempts must have been made by primitive men

to rear the young offspring of the animals they hunted, and sooner or later breeding in captivity and complete domestication would follow. Reference to recorded history, however, and again to contemporary primitive tribes, shows that there was no attempt to raise food deliberately for the domesticated livestock. Sheep and cattle followed their masters slowly over the natural pastures in search of the food they needed. This way of life is not favourable to soil cultivation. In most places, land has to be cleared of trees and scrub, and sometimes of stones and even of water, before it is fit for husbandry, and it is improbable that early man would have spent his labour on these tasks until he was reasonably sure that the soil won at so much effort would have more than a passing usefulness to him. In the book of Genesis, Abraham and Lot are disclosed discussing the problem of pasturage for their flocks and deciding that they must separate and go different ways<sup>1</sup>; in Central Africa and in other parts of the world, nomadic pastoral tribes may be seen today, moving on to fresh hunting and grazing grounds as their necessity dictates.

It must not be supposed that conditions such as these were universal at any given date. The continued existence of these primitives today shows how slow has been the evolution of farming processes, and how unevenly it has proceeded. How far the conditions briefly described above characterized primitive life in Britain, or at what time, it is impossible to say. It is a fair assumption that, so far as they occurred, it was in the time before the English Channel cut this island off from the Continent, when the River Thames may have been the tributary of a much greater Rhine. Climatic conditions, too, would exert a considerable influence upon the habits of primitive man and the source of his subsistence.

No-one can tell when the cultivation of crops in Britain first began, but the country in which our forefathers lived was entirely unfitted, in most places, in its natural state, for the practice of any sort of agriculture. Much of it must have been covered with dense

<sup>1</sup> Genesis xix

wood and/or scrub forest, out of which rose the mountain ranges and high moorlands, too steep or too exposed for the growth of timber, and the higher downlands of the chalk formation. In certain parts, too, on the poor, dry sand and gravel soils which were unfit for the growth of natural woodland before the introduction by man of coniferous trees, there must have been great stretches of heathery wastes. In other parts again, the river valleys and estuaries, there were extensive areas of marshland and water. But with these exceptions, and they were considerable, it is fair to assume that in the beginning all the land of England now occupied for agricultural purposes was woodland of varying degrees of density. To-day, whenever a field is left untilled by the plough and unstocked by cattle and sheep, Nature asserts herself at once, and a process of reversion sets in forthwith which clothes the land, first with weeds and wild grasses, then with brambles and thorns, and finally, with scrub. This is not conjecture. The process, in all its stages, can be seen in many places to-day. So it may be stated, as a jumping-off point, that with the exception of the mountain pastures, of the downland grass and arable lands, and of the moorlands and marshes, the whole of the farm lands of England have been reclaimed, at an infinite expenditure of manual labour, from natural woodland.<sup>1</sup>

'The earliest evidence of the occupation of land comes from the moorlands and downlands, particularly the chalk downs of the southern counties. On them are many signs of early human activity. Camps, dykes, earthworks, barrows, lynchets abound, and, most important of all for the agricultural historian, village settlements and their field systems can be identified. These remains are often visible to the naked eye, but recently air photography has been doing much to extend and to clarify knowledge on this subject. Ground that once has been disturbed, even though apparently levelled again to make one surface with its environment, leaves a record which is picked up by the camera film, even when nothing can be detected by the human eye.'

Similar evidence, though there is less of it, is derived from some of the high moorlands, such as Dartmoor, and while

<sup>1</sup> C. S. and C. S. Orwin, *The Open Fields*, p. 15

it must not be supposed that these were the only districts occupied by primitive man in Britain, it is likely that he would select places where his simple tools would give him a return for his labour greater than that which he could expect on the more fertile lowlands, with their dense covering of natural growth.

The earliest field systems, whether those still visible or the far greater number revealed by air photography, consisted of small inclosures, many of them less than an acre in extent, within well-defined boundaries composed, it has been suggested, of the stones and rubbish removed from the surface of the land. It is impossible to say with any accuracy when these fields were cultivated, by whom, and how, but it is obvious that they must have been laid out and used before the introduction of the common plough, ancient though that implement be. A reasonable assumption is that some kind of hoe husbandry was practised, using a pronged stick or a deer's antler to stir the soil. Later, as man's ingenuity developed, an implement like the breast plough, or the *caschrom* of the Scottish islands, both of them still in occasional use, may have been added to the equipment. In these ways the little square fields were tilled, and corn was grown.

Sooner or later, the stimulus of necessity, or man's inventive genius, suggested the harnessing of animal power to the heavy task of cultivation. When the point of progress represented by the breast plough had been reached, and cattle had been domesticated to man's use, it would not have called for much imagination to convert the implement from one pushed by the cultivator himself to one pulled by his oxen for him. A beam fixed near the foot, ending in a yoke or yokes for the team, was all that was needed, and there is ample evidence that this was what they did. The husbandman's task was now reduced to holding the plough on its course and driving the oxen. More work could be done in a given time, and at a lower output of his labour. But the work done still consisted of nothing more than a stirring of the soil, and by contrast with the more laborious process of digging, it was relatively

inefficient. The next technical advance, therefore, introduced the mouldboard, which, as its name suggests, was a wooden board fixed on edge to run from the ploughshare backwards and slightly outwards, so as to catch the soil stirred by the share and turn it over to form a furrow slice. By the joint action of share and mouldboard, the effect of digging was produced. Other refinements followed, as for example the coulter, which cut the herbage and roots in front of the share and facilitated its task ; and later, the addition of wheels, to give easier control of the depth of ploughing. In all essentials, therefore, the plough as it is seen today in the more highly developed agricultural countries, was evolved by the husbandmen of at least 2,000 years ago.

When the plough thus developed reached Britain is not known, but it may be doubted whether it had arrived before the Roman occupation. Even today, the British Isles can show crop production in progress with the aid of the foot-plough, large parts of Southern Europe are cultivated with the scratch plough (the plough without a mouldboard), while single-furrow ploughs drawn by cattle and horses may be seen in operation alongside multi-furrow ploughs drawn by mechanical power. At this moment, in Britain itself, implements in use thus show a range of some 2,000 years, which brings home at once the slowness of the spread of agricultural invention and the difference in the rate of its adoption in different parts of the world. In this respect some parts of Britain, which have been farmed for many centuries, are far behind, in their technical equipment, most parts of the New World which have been under cultivation for hardly a hundred years.

The development of the mouldboard plough added to the length of the implement and to the draught, which in their turn called for a larger yoke of oxen. Longer stilts had also to be fitted, to give additional leverage to the ploughman in holding his plough straight, and when turning. The combined effect was to produce an implement needing far more scope than could be found for it in the small inclosures of the little square-field system, which therefore gave place to one of long

narrow strips, ample evidence for which at an early date in British agriculture is also disclosed by air photography. A system of cultivation is revealed identical in all its essentials with that which is practised almost everywhere in the country today—a layout of the land for ploughing in lengths dictated partly by the fall of the land and the need for maintaining surface drainage down the furrows, and partly by the distance which the ox-team and the ploughman could travel comfortably without a let-up.

The Britons were growing corn for self-supply before the Roman invasion. Julius Caesar has recorded that on that occasion (55 B.C.) his soldiers were able to cut corn, and there is even evidence that about that time and later, British-grown corn was exported. Whether this were surplus to home requirements or whether it were tribute is a matter for conjecture. Tacitus, in the life which he wrote of his father-in-law, Agricola, Governor of Britain A.D. 78–85, remarked upon the fertility of the soil, which would yield abundantly, he said, all ordinary produce, although it is true also that Caesar recorded that the people of the Midlands did not sow corn but lived on milk and meat. Clearly cultivation was selective ; farming had reached a high level in some of the southern counties on the higher and drier lands, while the great woodland area of the Midland plain was still mainly pastoral.

The Roman occupation seems to have added both to the extent and to the quality of the farming in those parts of Britain over which its influence was directly exerted. An examination of the finds made on the excavation of Roman settlements shows tools and implements in use, any one of which might be used without arousing comment by any English farm worker today, so little change has there been in their form and construction—ploughshares and coulters ; picks, spades and shovels ; reaping-hooks and scythes ; anvils and sledge-hammers, in fact, nearly everything in common use today except machinery.

With the end of the Roman occupation after some four hundred years, and the beginning of the Saxon infiltration, the



Plate 2 Prehistoric Square Fields, Great Litchfield Down, Hants  
Photo : *the late Major George Allen*

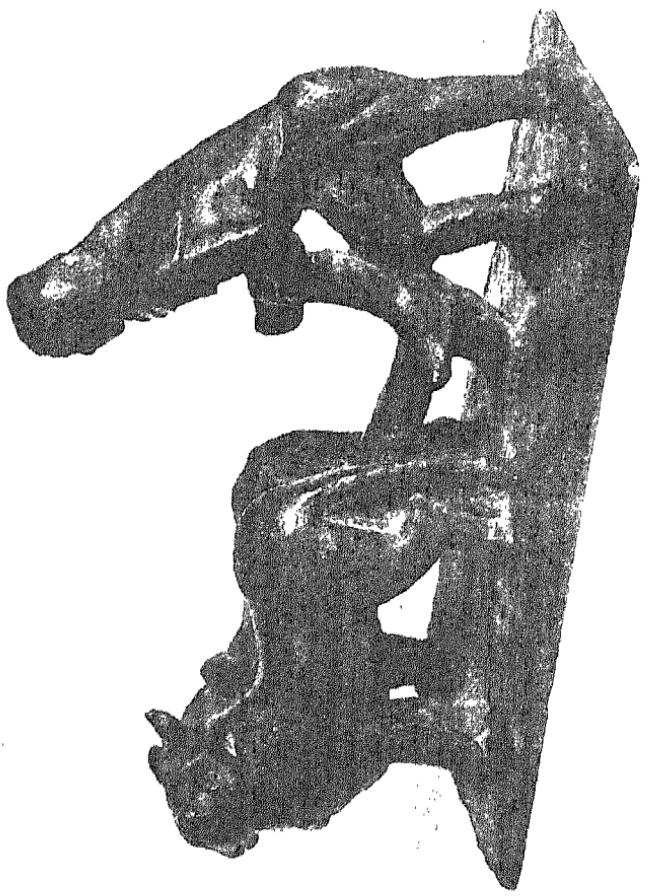


Plate 3 Romano-British Plough in the British Museum

curtain descends upon the rural scene, and there is little or nothing by which we can learn of the progress of farming in this country for the next few centuries. Before the Norman Conquest, however, it is clear from the documentary evidence in charters, ecclesiastical records and chronicles, that there was a well-defined land system in the days of the later Saxons and the Danish kings, suggesting that there had been steady progress in husbandry through the Dark Ages. The agricultural system that emerges as being general over a large part of the country is that which is called the Open Field system.

#### THE OPEN FIELDS

Farmers in Britain today are engaged, all of them, in the production of food for the market. Incidentally, no doubt, most of them are self-suppliers of some of their own requirements, but taken as a whole, agriculture is a manufacturing business as much as any of the nation's other great industries. Before the Norman Conquest, and for long years after, however, the bulk of the food production was for self-supply. This is in direct contrast with the occupational distribution of the population today, for very few of the people then were non-agricultural. Even the village tradesmen and craftsmen were many of them occupiers of land, and there seems no doubt that such trade in foodstuffs as there was, was restricted mainly to what amounted almost to barter between whole-time farmers on the one hand, and the village craftsmen who served them, on the other hand. This fundamental difference between the purpose of agriculture, then and now, must never be forgotten, because it explains the difference, equally fundamental, in the organization of land tenure and the control of farming, then and now.

Under an organization for the subsistence of the farmer, without opportunities for securing industrial profits, there was neither the opportunity nor the incentive to men to seek to extend the area of their operations. Everyone worked on the land, and almost everyone held land. In the absence of

landless labour, the size of a man's holding was rarely larger than that which he and his family could keep under cultivation without outside help. To start with, then, there was a far greater uniformity in the size of holdings in the years of self-sufficient farming, when England was an agricultural community, than in the more recent days of commercial farming to feed a community mainly industrial.

Equally, there was far more similarity, amounting almost to complete uniformity, in the systems of farming prevalent over large areas. If the object of farming were to provide for oneself and one's family, if the labour available were one's own and no more, it is obvious that the opportunities for introducing variations in the practice of farming would be negligible. Every man wanted, first of all, a sufficiency of bread corn for a year's supply, and when that was secure, as much of the animal products, meat and milk for food, and wool and skins for clothing, as he could contrive. Bread is still the first essential for human sustenance, and the lower the standard of living of any community, the greater is its dependence upon bread.<sup>1</sup>

It follows that there was a common stock of knowledge on the problem of how the land should be used to the best advantage, upon which all members of the farming community drew. When the curtain goes up on the rural scene in late Saxon times, it discloses agricultural practices showing a fairly advanced technique. Particularly, the plough is firmly established for the cultivation of the soil ; indeed, so important was it in the lives of the people that it had become the yardstick by which the circumstances of men's lives were largely controlled. Land measures, such as the furlong and the rod, were derived directly from it ; holdings were measured by its work, the ox-gang or bovate, the hide and later the carucate, (Lat : *caruca*, a plough). In the Domesday Survey, the extent of land under cultivation in any place is stated by reference to the

<sup>1</sup> This has been brought home to everyone with startling clarity by the famine conditions of large parts of the world, following the Second World War.

number of ploughs—"There is land for five ploughs." Finally, and perhaps most important, the introduction of the long inouldboard plough was responsible for the layout of the arable land of the village communities in great open fields, and for its distribution between man and man in small strips scattered throughout these big fields, instead of in compact holdings.

For these were the characteristics of arable farming in Anglo-Saxon times and for centuries after—land laid out in a few large fields adjacent to the village, in each of which the villagers occupied often as many as twenty small strips of half an acre or less, separated one from the next by those of their neighbours. Farming for subsistence limited the size of each man's holding to an extent of land which he could cultivate with his own labour, and on these small units it was impossible for each to maintain his own plough team. So the practice arose of co-operation between neighbour and neighbour to make up and to maintain a plough and its yoke of oxen, composed, as it may have been, of as many as eight beasts. The provision of the plough itself, of an ox for the team, of ploughman's and driver's services, each of these shares in the task entitled the man providing it to a share in the ploughed land.

Thus, if a group of the farmers of Widdicombe had joined for common ploughing, Bill Brewer, Jan Stewer, Peter Gurney and Peter Davey might have provided each of them an ox, Dan'l Whiddon might have found the plough, while Harry Hawk drove the team and Uncle Tom Cobleigh was ploughman. The team set out on a September morning, say, to plough the land for wheat sowing, and turned over half an acre before stopping. Uncle Tom Cobleigh claimed this as ploughman. The second day's work, going straight on from where they had left off, went to Dan'l Whiddon as the owner of the plough, and the third and following four days' work were assigned, each of them, to one of the remaining partners. Thus, after seven days' ploughing, each man had about half an acre of land ready for sowing. This and the subsequent operations, the harrowing etc. were performed individually,

but the need for joint action in the first task of breaking the land and for giving each partner an equal opportunity for sowing his corn under the best conditions, had resulted in this alternation of one man's land with another's as the work proceeded through the autumn ploughing season. By the time that the autumn sowing season was over, each partner should have had about five acres of land in wheat, in the form of ten half-acre strips scattered over an area of some thirty-five acres. If Uncle Tom Cobleigh, as the senior partner, had taken the first ten days' ploughing as his five-acre plot, while Harry Hawk, as the mere driver, got the last ten days as his share, the chances are that poor Harry's crop sown in December, would have been got in badly and the yield of corn next harvest for the subsistence of his family would have been far less than that of Uncle Tom's.

Other plough teams, similarly compounded, would have been working at the same time and on the same lines, according to the number of families in the community, and by Christmas a block of land had been ploughed and sown sufficient to give every husbandman not less than five acres of bread corn.<sup>1</sup>

Cultivation, thus organized, was resumed on adjacent land as soon as conditions permitted in the New Year, to provide the land for the spring corn crop, the barley, oats, peas or beans which each man might sow according to his fancy. Another large block of land was thus brought under cultivation, adjacent to the village and to the block sown with wheat, and again the husbandmen of the village community occupied it in little scattered strips of a day's work each.

The action of the plough, combined with the need for getting rainfall water off the land quickly, was responsible for the assembly of the strips into irregular blocks, called "fur- longs," for the term was applied to surface as well as to linear measure. A glance at a map of open fields shows that the half-acre strips of ploughing are not laid out in blocks parallel one with another regularly across the field, but that groups of

<sup>1</sup> The practice of co-aration is well described in *Ancient Welsh Laws*, quoted by Frederic Seebohm in *The English Village Community*, p. 120.

strips are collected together in blocks which vary in size, for no apparent reason, and also in the direction and the length of their strips. An examination of the land itself at once supplies the explanation, for it will be seen that the ploughing is laid out across the contours of the ground, so that rain-water would run off down the furrows, instead of lying in pools upon them. Whenever the contours of the land changed, even slightly, the ploughman had stopped, and had laid out his land afresh up and down the new slope. In any field which has not a dead-flat surface, the result is to produce a patchwork quilt effect, the patches, or "furlongs," being made up of aggregations of individual strips, all of them following the fall of the land. In some parts of the country furlongs were known also as "shotts" or "flatts."

A study of a map of open fields, suggests that the problem of access by each man to his little strips of land, scattered all over them, must have been very difficult. It must be remembered, however, that an open field of several hundred acres was not laid out as such all at once, but that it grew from the first half-acre strip with the slow growth of the community. Access was provided in various forms. There were a certain number of green roads or ways, over which everyone could pass, and upon either side of which the strips abutted. Full advantage, too, was taken of banks and rough or wet places which could not be ploughed (see p. 17), to provide approaches and headlands. Here and there, too, balks of unploughed land were left between the furlongs for the same purpose, and in the last resort the headlands of abutting furlongs became common ways at harvest and at other times, for the use of those concerned. Most writers on the open fields have followed each other in asserting that each man's little strips of land within the furlongs were divided from those of his neighbour by balks of unploughed turf. No convincing evidence of this has been found ; on the contrary, surviving terriers of the open fields account for all the land within the furlongs as ploughed lands, and where common balks between furlongs occur, they are specified and their acreage is given. The only dividing mark

between individual strips was the wide furrow produced in the normal course of ploughing.

It may be of interest to note that the examination of farms and fields today shows that the irregular shapes and sizes of fields, their crooked boundaries and other awkward features are explained, quite naturally, by reference to the layout of the furlongs in the open fields. Nothing could be gained upon inclosure by ignoring the contours which promoted surface drainage, or by cutting across the ridge and furrow of ancient ploughing to produce a new layout. Thus, those responsible for the allocation of land when the open fields came to be inclosed for farming in severalty, adopted the boundaries of the old furlongs already in being, for the new fields.

This description of the layout, occupation and cropping of the land may be regarded as the pattern, somewhat simplified, of what actually occurred. It shows, also, the origin of the earliest and simplest rotation of crops. Practical considerations divided the sowing season into autumn and spring periods, and the different requirements of the various crops determined which were to be winter sown and which spring sown. Very soon the early husbandmen realised that the land would not produce good corn crops year after year—its fertility was reduced, and it became choked with weeds—and so the practice arose, described by more than one of the early writers, of abandoning land that had been cultivated down to this level, leaving it to recuperate as best it might without further cropping, and starting again on fresh land. This practice satisfied the early husbandmen, no doubt, while there was land in plenty within reach of the village. The time came, however, when the growth of population called for more conservative use, and in the next stage of progress all the land accessible is seen in occupation in two parts, one half under crop and the other half in bare fallow. The cropped land contains winter- and spring-sown corn. The bare land, however, instead of being left foul with weeds and impoverished, is being actively cultivated throughout the summer. Experience had shown, and the fact is manifest today on many

farms, that a season's cultivations without cropping will not only clean the land by the destruction of weeds, thus making it ready again for sowing in the autumn, but the aeration of the soil, the action of rainfall upon it, and all the biological processes which are now known to go on inside it, combine to bring about a restoration of the lost fertility. So the first crop rotation was evolved, a "two-field" rotation of corn and fallow.

The village communities continued to grow, however, until even this more economic use of the land proved inadequate to support them, and the unproductive half had to be reduced. Accordingly an encroachment was made upon it to extend the area under corn, which resulted in a division of the arable land into three parts, roughly equal, instead of two, one of them cultivated and sown with winter corn, another with spring corn and the third bare-fallowed. Experience again had shown them that the land would carry two succeeding corn crops without undue loss of fertility, and that it recuperated if rested for one year in three.

In this way the three-course rotation was evolved. Naturally, it was the winter corn—the wheat crop—which was sown on last year's fallow field, for this would be ready for sowing any time after harvest. The spring corn crops followed wheat in the rotation, and they in their turn were followed by the bare fallow to rest and clean the land after its two years under crops.

It must not be supposed that this change from a two-course to a three-course rotation took place suddenly in England, or everywhere at the same time. The two rotations are recorded in practice at the same period in different localities, so that some writers have sought to identify permanent differences in practice therefrom, and to attribute differences in farming in one part of England from farming in another to racial or tribal characteristics rather than to different rates of progress in the evolution of farming.<sup>1</sup>

The three-course rotation thus practised characterized

<sup>1</sup> See, for example, H. L. Gray, *English Field Systems*

English farming for several centuries. As the "three-field system" it is synonymous with open-field farming, although this is not to say that it was practised invariably in three fields of equal size. In many places one great expanse cropped in three sections was the layout, while in the only place in which the system still survives, Laxton, in Nottinghamshire, there were four fields, the combined acreage of two of them being equal approximately to that of either of the others. The actual number of fields was a matter of convenience dictated by the lie of the land.

For the farmer self-sufficient in labour and cultivating his land for subsistence, the three-course rotation made the most efficient use of his time and labour, while allowing him a certain amount of choice in the arrangement of his cropping. Harvest over, he could turn at once to the fallow field lying ready for sowing, and could get his wheat in, to make his bread corn for another year secure. This done, ploughing the wheat stubble would follow, in preparation for spring sowing. Spring corn offered a range of crops from which he could select, to provide more grain for himself, barley for bread or brewing, or fodder grains for his livestock. With the advent of summer, his flocks and herds would occupy him till haymaking began, and all the time there was the last year's spring corn stubble, now the fallow field, calling for cultivation whenever there was no work more pressing. Often it was ploughed five or six times. Harvest followed closely on haymaking, the end of the agricultural year in which there had been no idle moment and the seasonal demand for labour had been well balanced.

The open-field system occurred widely in many parts of the world. There are grounds for thinking that in early times there was a re-allocation each year of the strips of land composing the individual holdings, and this practice certainly persisted until recently in Russia, though at longer intervals. In England, there is no surviving historical evidence for the regular redistribution of strips, though holdings were frequently broken up and reassembled on a change of tenancy.

This is one of the conspicuous advantages enjoyed by farmers in the open fields by contrast with their descendants on their inclosed holdings today. Living as they did in the village, with no houses or buildings in the fields, and occupying land scattered all over the parish, it was a simple thing for an old man, whose children were grown up, to surrender a proportion of his strips in each of the three fields, to enable a son to start on his own. The death of a tenant would be another occasion for a redistribution of the whole or some part of the holding, to enable a man with a growing family to have the extra land he needed, and in later times, perhaps, when opportunities for commercial farming were beginning, to enable the more capable men to extend their operations. Anyone practising a village trade, too, would not be able to cultivate so much land as a full-time farmer, though nearly all of them were part-time farmers.<sup>1</sup>

Turning now from crops to livestock, the cultivated land provided little other than by-products for the maintenance of the farmer's flocks and herds, in the days of subsistence farming. There was straw, of course, and stubble-grazing and such like, but most of the crops cultivated, even peas and beans, were put under tribute for human food in times of scarcity. The most important and very often the only crop allocated entirely to the use of livestock was the hay crop, and so important was it in the days before roots, clovers and rotation grasses were known, that meadow land was jealously preserved and allocated. It occurred, commonly, in the lower-lying parts of the parish, often beside streams, where the ground was moist and heavy cuts of grass could be relied on. Such land was set aside for mowing, and it was allocated between farmer and farmer very much as were the ploughlands in the open fields. There was nothing comparable, of course, to the communal plough, but strips representing roughly one day's mowing with the scythe, were distributed amongst the farmers. Distribution

<sup>1</sup> At Laxton in the seventeenth century the only tenant who did not occupy any land was the miller, who, being paid for his services partly in grain, may not have needed it.

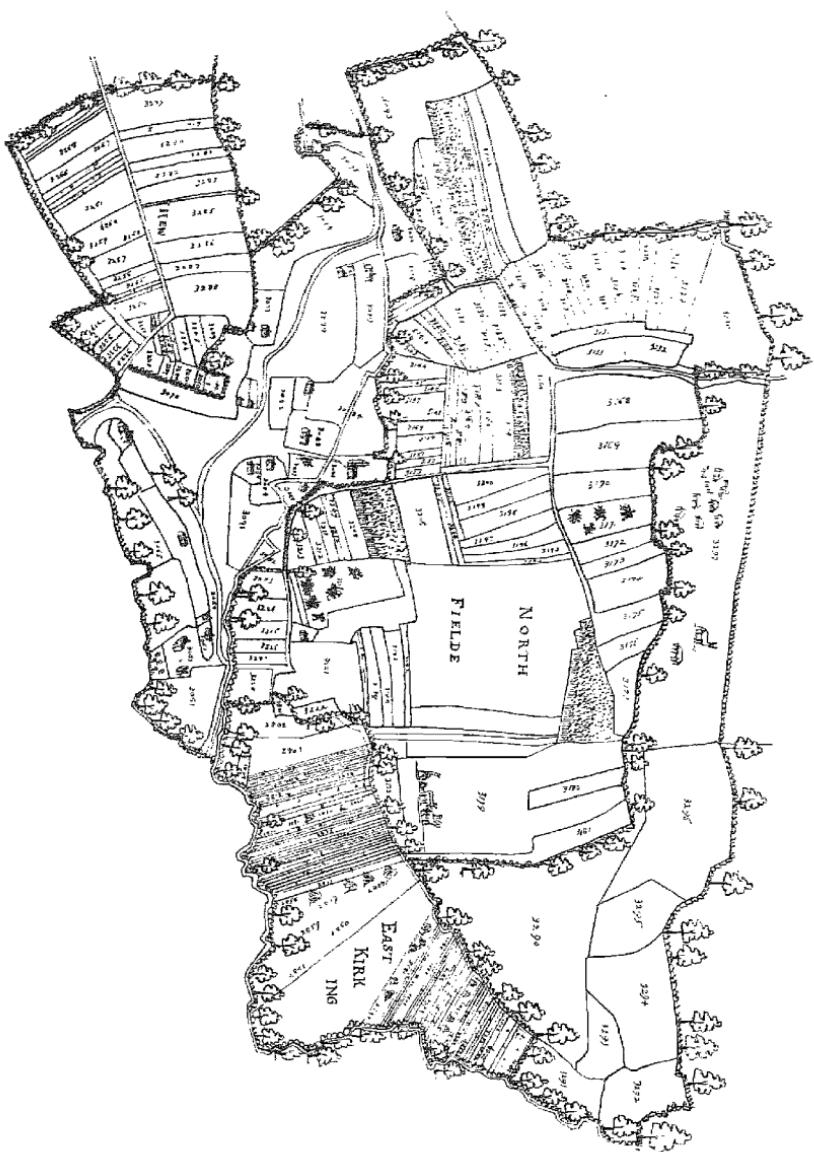
of the strips was made sometimes by casting lots, and the name "Lot Meadows" survives today in many places. Otherwise, whatever may have been the earlier practice, continuous occupation of particular strips by particular persons was established. However allocated, all the meadow land became commonable after a certain date, generally 1st August, and all those having the right to cut grass upon it could turn out their livestock together, to graze the aftermath during the rest of the summer and the autumn.

In the absence of all the crops grown in more recent times for folding, such as rye, tares, clover and turnips, or for storing or cutting for winter feed, such as swedes, mangolds and kale, the only other food for the maintenance of farm livestock was grass and other natural vegetation. As time went on, and the encroachments of a growing population upon the wastes reduced the available grazing area, the conservation of all possible forms of herbage was of increasing importance. By the time that the open-field farming system was fully developed, the available grasslands were as follows :

(i) *The Grass Commons.* These, for the most part, were lands adjacent to the village and the open fields, out of which the settlement and the cultivated areas had been carved. The right to graze livestock upon them was confined to the occupiers of certain tenements. Most of the commons were strictly regulated ; the classes of livestock, whether horses, cattle, sheep or geese, and the numbers of each or any of them permitted to those having rights, were prescribed, so as to prevent overstocking. The poor quality of the farm livestock on "unstinted" commons was one of the strongest arguments used for their inclosure in later years. As the farming system in the open fields evolved and became more highly organized, it was the practice, in some places, to allocate various commons to particular classes of stock. The commonest, perhaps, and one which is still met with, although the rights to use them have fallen almost everywhere into abeyance, was the Cow Common, but there were also Horse Commons, and some, generally of very poor quality, set aside for geese, upon which

Plate 4  
HAMLET OF LAXTON MOORHOUSE

*From a map of the Manor and Lordship of Layton, with  
Laxton Moorhouse, in the County of Nottingham, made by  
Mark Pierce in the year 1635, now in the Bodleian Library*





turf and furze cutting for fuel might also be allowed. This segregation of the livestock was provided in order to make more effective use of the precious grazing. Horses and sheep, for example, are close croppers and will starve cows, while geese "poison" the land for other stock. In particular places, there is mention of the Bull Close, and mares and foals sometimes had grazing allocated to them separated from the other horses.

(ii) *The Meadows.* Mention has been made above of the right to graze the aftermath of the meadows after hay harvest. This was restricted to those having the right to mow, and it was exercised for a definite period only, which began at a date consistent with the completion of the hay harvest and finished before winter set in; continued stocking would have poached the land and ruined next year's hay crop. Lammas (1st August) to All Saints' Day (1st November) was a common period, and such grazings were often known as Lammas Lands, or Lammas Meads.

(iii) *The Open Fields.* It was not only to the grasslands that the farmers in the days of subsistence farming looked for the maintenance of their livestock. Although the cultivated land may not have been put under direct tribute to produce crops for animal consumption, the open fields themselves were the source, indirectly, of much valuable grazing at certain seasons of the year. In the first place, there were the stubbles, and in the days of the reaping hook and the binding of sheaves by hand, there was a long stubble and shed corn, which, together with weeds and grass, provided good keep for a month or two after harvest. In these great fields, too, green roads had to be left to provide access to the farmers' strips, and it was rarely that the whole extent of the fields, running up, as it often did, to five hundred acres and more, was ploughable. There were also wet places, steep banks, stony barren places, sometimes known as "sikes," all of which had to be left uncultivated, and all of which grew grass.

The use of this open-field grazing depended upon the place of the field in any particular year in the rotation. The

stubbles and grass of the winter and spring cornfields were thrown open directly after harvest. In some places the church bell was rung as the last sheaf was carried, and all those occupying strips in the fields hastened to drive their livestock on to them. Here they remained on the wheat stubble until the middle of October, when they were driven off, so that the field might be ploughed for the spring corn crop. On the spring corn stubble, the field which was to be the bare fallow of the following year, unrestricted grazing was permitted until the middle of November, after which a limited number of sheep could be left on the field by each occupier, to live as best they might until the following October, when the field was wanted for the wheat sowing.

In any of the big open fields in which the grass on the areas of unploughable land was considerable, special arrangements had to be made for using it during the summer, when the corn was growing and promiscuous grazing was impossible. Tether grazing was one expedient, horses and cows being led out to the sikes and secured by ropes and stakes so that they could eat the grass without damage to the surrounding corn. In other places, the grass on the sikes was made into hay, the right being sold, and the proceeds divided amongst those authorized to turn out stock in the fields.

(iv) *Roadside Strips and other Wastes.* Even the verges of the highways through the village and the fields were brought under tribute—at least in the later years of subsistence farming—and the right to mow them for hay was let annually in many places.

It must be remembered that both the opportunities for pasturage and the practices regulating its use varied in different places, and that the foregoing description is no more than a generalization from what was often to be found. The extent of uncultivated ground differed in different places, and in some, unstinted grazing might be possible without detriment to the stock. In other places, grass commons were shared by two or more parishes. In early times, too, woodlands were put under tribute, anyhow at certain seasons, so that the swine

might grow fat upon beech mast and acorns before killing-time. Even so late as the seventeenth century, John Evelyn thought it worth while to comment upon the food values of the leaves and boughs of various trees.

With all their care for the conservation and use of the grass land, the subsistence farmers of the open fields were hard put to it to feed their livestock. By careful regulation of the numbers allowed to each farmer, a breeding stock could be kept up, and, of course, the draught animals for the plough. The limiting factor was the supply of winter feed, and the hay and straw available sufficed for little more than these essential beasts. Some yearlings, no doubt, were carried round to the next grazing season, but the approach of winter was the time at which most other stock had to be slaughtered and salted, this being the only way of maintaining a meat supply.

A system of land tenure and farming such as that which was pursued certainly for a thousand years in this country, and maybe for far longer than that, was obviously complicated and involved. The intermingled strips of land could provoke boundary disputes ; the liability of so many occupiers for scouring even short lengths of ditches where their half-acre strips abutted on them, or of fencing their lands' ends where they adjoined the open roads, almost invited evasion ; the right of one man's access to his strips over another man's land could cause annoyance and even loss, were he a laggard husbandman ; the rules regulating the use in common of the grazing lands were a challenge to the ingenious and unscrupulous.<sup>1</sup> Indeed the scope for breakdown inherent in the system would seem to have been so great that it is difficult to believe that the greater part of the country depended upon it for its food supplies for so long. Two things, however, accounted for its strength. In the first place, everyone was farming in the same way and with the same objects. There

<sup>1</sup> For example, a man with the right to graze one cow was fined for grazing one during the day and another during the night, in effect, two cows.

was no question of selective cropping to suit individual choice or to catch the market. The fact that the common object was self-supply stereotyped the whole business, and produced a common technique. Everyone was doing the same thing at the same time. The laggard and the sloven could be nuisances and the dishonest had to be watched, but the common timetable and the common fund of knowledge did much to keep the intricate machinery from creaking. In the second place, in every community the rights and liabilities of the parties were defined by well-established custom, from which there was no appeal, and in the later days of the open fields and common grazings it was put on record in the form of rules and regulations. These were confirmed or varied from time to time by the majority opinion of the people themselves, and their observance was secured or their breach detected by a panel elected for those specific purposes. Let us see how this control was administered.

The King was the ultimate landowner and all land was held from him at first hand, or, it might be, at many removes, by services of one kind or another. From the great noble, with estates perhaps in many counties, down through every grade to the peasant occupier of a few strips in the open fields and the right to graze some geese on a common, no-one was the absolute owner of his land, but held it from a higher landlord, culminating in the Crown. This is the legal theory of the feudal system. For a long time after its introduction into England, acknowledgments for the rights to land bestowed upon the various classes of tenants, were not paid in money rents but in various forms of service. For the highest form of tenancy, a holding direct from the King, these consisted for the most part in the provision of men-at-arms and military equipment for the King's wars. From the lower groups of tenants, labour services of various kinds were required, and it is with these that agricultural history is concerned. Most of the members of the village communities were small subsistence farmers holding from a higher landlord, the lord of the manor. But he, too, was also a subsistence farmer, growing

the food which he needed for the support of his family and his establishment. In early times he had his share of the strips in the open fields for corn growing, and his pasturage for sheep and cattle, though long before there was any general movement noticeable in the country towards inclosure, the lord is found to have consolidated his own farm lands to form the closes of his demesne. Whether as a participant in the open fields, however, or whether farming his own home farm, he looked to his tenants for the labour needed for all the commoner farm operations, ploughing, harrowing, weeding, haymaking, harvesting and carrying. So many days' work at the different seasons of the year were specified for each tenant, and it was the duty of the lord's bailiff, or reeve, to call for them as they were required, and to see that they were carried out.

At first sight, service rents might appear irksome and even oppressive. In the absence of opportunities for commercial farming, however, they worked well enough, particularly before the days of a general money economy. If a tenant had been required to pay a cash rent, he would have had to grow so much agricultural produce for sale, to realize it, and except that he could not consult his own convenience as to the times at which he would perform his services, it can have made but little difference whether the corn were grown or the hay were made upon his own land and sold for cash, or whether it were produced upon his landlord's land by his labour. This is not to say that the administration of the system was not sometimes harsh or oppressive, but this was not necessarily inherent in the practice.

The tenants of the manor fell roughly into two classes, the free and the unfree. The former could alienate their land and bequeath it, whereas the latter could not. Freemen could leave the manor, while the unfree, the villeins, needed the lord's permission. Both, however, owed suit and service to the lord for their land, although the nature of the services and their extent were not necessarily identical.

Local administration centred in the Manor Court, and its constitution and functions are important. It dealt both with

civil and criminal cases. It was presided over by the lord, or by his steward, supported by the freeholders, and every tenant of the manor had to attend whenever it was summoned, usually twice a year. It recorded the changes in tenancies, the admission of new tenants and the exaction of payments due on death and admission. It fined absentees, it heard the presentments of those who had broken the by-laws and regulations established by custom or by the court in the past, and it is this particular function which bears most directly on agricultural history, for it was by it that the whole complicated business of common farming in the open fields was made to work.

Administration by the Manor Court was effected through a small body of officers. The most important of these were the jury, twelve tenants of the manor who were appointed yearly and whose duty it was to secure the observance of the customs and regulations controlling the practice of farming. For this purpose they made periodical inspections of the open fields, and subsequently they presented to the court those who had offended, whether by acts of omission, such as failure to fence their lands along the roadside or to dig out their ditches, or by acts of commission, such as ploughing too far and encroaching on the common ways, removing boundary marks, turning out more livestock than they were entitled to graze and so forth. Other officers were the pinder, or pounder, whose duty it was to drive straying stock out of the cornfields and impound them in the village pound, or pinfold, until claimed by their owners and the appropriate penalty paid ; the hayward (i.e. the hedge-ward) responsible for the fencing of the plough strips along roadsides to prevent damage to growing crops by livestock passing and repassing to the common grazings, the office being sometimes combined with that of the pinder ; the burleymen, or byclawmen, who had to keep watch for breaches of regulations controlling acts of cultivation and the common grazing.

The whole organization, both economic and social, illustrates the high degree of self-sufficiency in the English village

community and the personal responsibility of each of its members for its good government. Membership of the jury and the tenure of all the offices named above rotated annually amongst those eligible, who comprised everyone liable to attend the court. As the population grew and the means of transport and communications were developed, along with the steady progress of industrialism, village isolation was gradually broken down. Parochial self-government continued for a long time, however, under the jurisdiction of the Manor Court and of the Vestry, and many of the functions they exercised were not superseded until the enactment of the local government legislation of some fifty years ago, which set up the County, District and Parish Councils. The Manor Court itself continued, with some show of authority in small matters, until Parliament finally brought the long chapter of manorial history to a close by the enactment of the Law of Property Act, 1922. From that time the transfer of the administration of local government from officers elected annually by the community from their own number, to full-time professional officials appointed by the councils, was complete. Instead of sharing, turn and turn about with his neighbours, in the administration of the affairs of his village, the responsibilities of the individual today extend no further than holding up a hand at a meeting or making a cross upon a ballot paper.

The system of farming by intermingled strips in great open fields was found all over Europe and in parts of Asia. In some countries examples are plentiful today. In England it has completely disappeared, except at Laxton, Nottinghamshire, and the extent to which it once was general cannot now be determined with certainty. There is good evidence for deducing, however, that wherever the contours of the land and its altitude made arable cultivation possible, the advantages of joint organization and effort led to its development and practice. There was less of it in the hilly districts of the west and north, and in these parts there seems to have been a development of farming in inclosures occupied in severalty

earlier than in the Midland plain and the eastern and southern counties of England. The rural population was sparser, it was concerned more with livestock, relying, if Julius Caesar can be believed, more on meat and milk and less on corn for its diet. Thus, while it is a fair generalization that English farming in the self-sufficing days was mainly a co-partnership by village communities for the exploitation of the land for arable farming, it must be remembered that simultaneously in some parts of the country systems more pastoral and individual were in operation at the same time.

It is no more than a fair generalization, too, to say that farming in the open fields was practised for self-supply. The isolation of village communities for a large part of the year threw them entirely upon their own resources. Even so, there was a certain amount of trading within them, between the village craftsmen and the husbandmen, who together made up balanced societies. Beyond this, farming for the market was restricted to those places within reach of the towns. For most of the inland counties, this meant a distance of comparatively few miles. Right down to the eighteenth century, heavy traffic was impossible on the green roads which formed the bulk of the highways, and pack-horse transport had obvious limitations for bulky goods. The counties bordering on the sea and on the lower reaches of the larger rivers could take advantage of water transport. Farming for the market was first developed in them—the larger towns, placed generally on river estuaries, being, in fact, supplied in this way.

It must be remembered that the growth of commercial farming, even where transport facilities were available, was a very gradual process. At the same time, it was continuous, and it was the demands of the town dweller and the non-agricultural worker in many parts of the country which led, ultimately, to the breakdown of communal farming and the change from the policy of self-sufficiency in agricultural practice to one of production for a market.

## CHAPTER II

### FARMING FOR PROFIT

#### THE FIRST AGRARIAN REVOLUTION

IT is difficult, if not impossible, precisely to date the great changes in the economic life of the nation which are clearly visible in retrospect. Most of them have been gradual, and effective only after lengthy transitional periods. Now and again, however, it is possible to be more positive and to date the causes of economic evolution with some precision, and an event which did more, perhaps, than any other to bring about radical changes in the English land system and the practice of husbandry was the Black Death, the pestilence which swept the country in 1349. Even so, however, the seeds of the changes which were to have such far-reaching effects were already germinating, and the Black Death served mainly to bring them to fruition. The enfranchisement of villeins from the toils which tied them to the land, and the commutation of their service rents for money payments, for example, had started long before, but it is obvious that a great plague which reduced the numbers of this class of the community by a proportion variously estimated at one-third to one-half, must have affected profoundly the relations of landlord and tenant, and must have strengthened very materially the bargaining power of the survivors amongst the latter. The demand for freedom from labour services on the demesne land was intensified, and lords of the manor, with much land in the open fields thrown back on their hands by the deaths of their tenants, had no other course than to agree.

What were these services ? There was a great variety of them and they differed from manor to manor according to local conditions. An agreement from the *Chartulary of Winchester Cathedral*, made about 1310, between the prior and one of his villein tenants, John Durdant, for services and

rent to be given for the half hide of land which he held in Whitchurch, may be quoted as an example. John acknowledged that

. . . an annual rent of 10s was due at the feast of S. Michael. He must give at the term of S. Martin a bushel and a half of wheat. He must plough and harrow 6 acres at the winter sowing, and 2 acres at the Lent sowing, and shall have acquittance therefor of 1*qd* at both times. He shall take seed from the Prior's farm for his sowing, and shall erect no fences to prevent the Prior's oxen or other animals grazing according to custom. He shall supply a man to shear the Prior's sheep with other men of the town, and . . . shall attend to the shearing and weighing of the wool to prevent any loss by the Prior's shepherds, and he shall have 4*d* beer money with other men of the town. He shall provide a man for two days in autumn for boon work, and further, either he or his servant shall appear with his horse to see that the lord's corn is well reaped, and on the two boon days he shall eat with the Prior's servant, and as required in autumn he shall cart the lord's corn with a cart of his own. He shall pasture his sheep in the Prior's pasture everywhere, except on Haydown, and on the lord's stubble, and in Holedean. He shall pannage his pigs, together with those of his neighbours, everywhere with the Prior's pigs in the wood and in all the cultivated land of Whitchurch. The Prior shall also keep his pigs on John's land after harvest time, and John must close his pens so that the Prior's pigs may do him no damage. John shall have 12 oxen, or other animals anywhere in the Prior's pasture, and shall pay for each 1*½d* at the term of S. Thomas the Apostle, and *½d* at the feast of S. Peter *ad vincula*. John has a tenement in the town for which he used to pay 8*d*, now he pays 10s for everything.<sup>1</sup>

It is evident that John Durdant was a fairly substantial man. He occupied half a hide of land, say sixty acres, with a house in the town, and he kept a servant and a horse. Yet he was required to perform all manner of services in consideration for his tenancy. There was a basic payment of 10s once a year. Besides this, he was responsible for cultivating and sowing a specified acreage of the demesne land of the Manor of Whit-

<sup>1</sup> *Chartulary of Winchester Cathedral*, edited in English by A. W. Goodman, B.D., F.S.A. (Warren), pp. 145-6

church, to share in the supervision of the harvest and to supply a cart and horse for carrying the corn. At sheep-shearing time he had to supply a man, and he had to be present, personally or by deputy, to see that the prior got his full measure of wool. These services, it may be argued, represented nothing more in time and cost than the outlay which he would have incurred on land in his own occupation in the production of crops and stock sufficient for the payment of a money rent ; but to the extent that he could not select his own occasions, but had to do what he was told by the prior's bailiff, it is obvious that such service rents would become increasingly irksome with the steady expansion of a cash economy. The conditions governing the grazing of livestock, however, are more difficult to justify, and they can only be regarded as bearing hardly on John and his like. He is to pasture his sheep and pigs on the prior's pastures, so that his lord's land may be manured. It is up to John to protect his own crops from trespass and damage by the prior's pigs. He is to undertake to stock the prior's pastures with a stated number of cattle and to pay him for the grazing. The custom of service rents and common cultivation which, in its inception, represented, no doubt, a large measure of mutual convenience, had become one-sided and was tending to be oppressive.

The heavy casualties amongst villein tenants consequent on the Black Death, increased the competition for labour and speeded up the movement for the commutation of services and the enfranchisement of villeins. Land in the open fields thrown on the hands of the lords of manors was added to the farms of the surviving tenants, and this brought them into the labour market as competitors with their landlords for the reduced supply of free labour. Wages rose, Parliament intervening for the first time to impose statutory control, and during the next twenty years a series of enactments was passed, such as the Statute of Labourers, 1360, to stem the tide of rising labour costs. It was the discontent engendered by this coercive legislation that was the real, if not the ostensible, cause of the rebellion fomented by John Ball and others, led by Wat

Tyler, in 1381. Though the revolt was successful in the field, for the rebels captured London, the Government did not keep the promises which it had made to them under duress, and the immediate results of the movement were negligible. Its momentum, however, could not effectively be stayed either by Government action or inaction, and the commutation of service rents, together with the remission of many customary feudal dues and requirements, continued all over the country. The rate of progress varied, no doubt, in different places, but for all practical purposes these handicaps on farming progress, which had not been felt in the days of complete local self-sufficiency, disappeared almost everywhere during the next hundred years as the basis of production and exchange continued to expand.

Another factor which contributed to the scarcity of labour and to the rise in wage-rates was the steady growth of the towns and the increase in their demands for workers. The villein desirous of freedom could get it by a successful escape from the jurisdiction of his lord for a year and a day. Concealment was easy in the towns, where no questions were asked, and the absconding villein was sure of a welcome. The "drift to the towns" is by no means a recent problem of rural sociology. The villein's freedom, however secured, might cut two ways. So long as he was his lord's "man" he had rights in the land which would give him a subsistence, as well as duties which tied him to it. As a free man, he could sell his labour where he liked, but if he could find no market for it, it was nobody's concern if he should starve.

In those days, the most important commodity derived from the land, other than food, was wool. An export trade to Flanders had been going on well before the Black Death, and the importance of it increased as the time went by. Markets, or staples, were established, sometimes in this country, to which foreign buyers would come, but more often across the Channel in the Low Countries or at Calais, to which the English merchants resorted with their wool. The principal districts concerned in this production for export were the

Eastern and Southern Counties and the Cotswolds, and the many beautiful contemporary buildings with which market towns of these areas are adorned, are evidence of the prosperity of the trade. It is interesting to speculate how the wool was collected and transported. Wool growers and wool staplers met to drive their bargains, no doubt, in the local market centres, and the survival, here and there, of inn signs such as the *Bishop Blaize* (the patron saint of woolcombers), the *Wool Pack* and the *Packhorse*, suggest places on the road travelled by the commodity across the country. The establishment of staples by royal edict in particular places promoted the interests of the trade by the concentration of buyers and the competition which this engendered, while incidentally, of course, it facilitated the collection of dues for the King's Exchequer.

The export of the raw material to the Low Countries was associated with the import of cloth from them, for the home-woven material was sufficient neither in quantity nor in quality for the demand. Then, as now, however, the greater profit was to the manufacturer and the merchant, rather than to the primary producer. Thus, steps were taken, particularly during the reign of Edward III, to foster the weaving industry and the production of woollen cloth in England, that ultimately were to make the English cloth famous and sought after in every market in Europe.

Whether for wool or for cloth, however, the Continental demand, associated to some extent with changes in the labour position at home, had a very considerable effect on the progress of English husbandry, and it was the largest factor in the change from subsistence farming to production for the market, in considerable parts of the country. All through the fourteenth and fifteenth centuries, the development of sheep farming for the wool market was clearly indicated as likely to be profitable, and it solved the difficulty arising either from the scarcity or the high costs of labour, which was acute at certain times during that period. Landlords, with arable land which they could not cultivate, both their own demesnes and

the tenants' strips in the open fields which had been thrown on their hands, had been driven to inclose it and to lay it down in grass for sheep grazing, as being the only form of farming which they could keep going. Then, as the wool trade developed, first for export and later for the home weaving industry, the pursuit of profit led them towards a deliberate policy of more inclosures and larger flocks.

Thus began the movement which is known as the Tudor inclosures. The extension of the open arable fields by the addition of strips had long ceased, intakes from the waste to meet the needs of growing village communities before the Black Death having been in the form of small inclosed fields. At different times in different places, too, the lord had withdrawn from farming in common with his tenants in the open fields, and had consolidated his demesne farm by the inclosure, presumably of an equivalent acreage, of those parts of the open fields which lay most conveniently around the manor house. Such a consolidation could be effected without any necessary hardship to the other farmers, owing to the flexibility of strip farming. Rearrangement of holdings in the open fields by a reallocation of strips was a common incident of the system. The death of a villein tenant with no-one to succeed him would call for the assignment of his strips to other farmers. Thus, the consolidation of the lord's holding involved nothing more than the allocation of the strips which he gave up to those of his tenants who lost strips by the inclosures which he made. Spread over the three years of the farming rotation, and carried out in each field only when it was in fallow, no-one of his humbler neighbours should have been really prejudiced by the consolidation of the demesne farm.

From the record of services required by way of rent, it is clear that the extent of demesne farms was often considerable. With the commutation of labour services for money rents, it is equally certain that the lord's demand for hired labour to work his land would be considerable. As the wool trade prospered, and he could turn his ploughland into grassland for sheep, his labour problems diminished, and sooner or later

he was tempted, often, to turn covetous eyes on the rest of the manorial land not directly occupied by him. Thus in many places, by the time of Henry VII, there had begun an inclosure of wastes, grass commons and woodlands on a considerable scale, to facilitate the extension of the lords' sheep farming, and finally, in a number of places, they and their larger tenants began to make inclosures of arable strips in the big open fields for the same purpose.

Contemporary legislation and literature bear witness to the hardships which this exploitation of the wool market was apt to bring to the smaller tenants of the manors. Some of them were dependent upon the maintenance inviolate of the communal principle of open-field farming, and the reduction, for example, of the total area of stubble grazing or of grass commons, by inclosure, might upset entirely the livestock side of their farming economy. Others again, occupying no more than a few strips, or having nothing except the right to turn out stock on a grass common (a *toft* right), and dependent upon opportunities to sell their labour for the rest of their means of living, found these opportunities getting less and less as more and more ploughland went down to grass. Lord Ernle quotes many contemporary sources for evidence of the distress which the inclosures occasioned, resulting in actual depopulation and the abandonment of houses and farm buildings :

Cormorants who let two or three tenancies unto one man.

Take in their commons till not so much as a garden ground is safe.

Make parks or pastures of whole parishes.

Sheepe have eate up our medows and our downes,  
Our corne, our wood, whole villages and townes ;  
Yea, they have eate up many wealthy men,  
Besides widdowes and orphane childeren ;  
Besides our statutes and our Iron Lawes,  
Which they have swallowed down into their maws :—  
Till now I thought the proverbe did but jest,  
Which said a blacke sheepe was a biting beast.

The ambitious subtletie of those who make one fearme out of two  
or threc and even bringe VI to onc.

As with the earlier legislation, however, which aimed at controlling wage rates, neither laws, nor sermons, nor broad-sheets could stay the economic forces behind this inclosure movement. The advantages of occupation of farms in severalty rather than in common, whatever the purposes of the systems of husbandry followed in them, were too great for the more enterprising of farmers and landlords to forgo them. The administration of the laws, too, was largely in the hands of those whose interests lay in breaking them, and so, from one cause or another, the movement continued until well into the reign of Queen Elizabeth, after which, although, of course, it never stopped, the pace of its progress slowed down until it received a fresh impetus, under very different conditions, in the eighteenth century.

Sheep farming, as developed during the time of the Tudor inclosures, was based almost entirely upon grass. The smaller farmers, with little or no land outside the open fields, continued to carry a few sheep on the stubbles and fallows, but the big development of the wool industry was due to grass flocks. Sheep were kept for clipping rather than for mutton, and there are grounds for thinking that the quality of the local breeds improved as inclosure progressed and selection and control thus became possible. Sires could be selected and lambing time regulated. On the open fields and common grazings this was impossible, and the standard of all was the standard of the lowest. Long-wooled, short-wooled and lustre types were already distinguishable in Tudor times, as well as the hairy, kempy-wooled breeds from the mountain regions of the north, the clips from which, it may be supposed, formed no part of the high-class Continental trade. Gervase Markham, an agricultural writer of the sixteenth century, distinguishes the breeds of his day by the quality of their wool. The finest wool seems to have come from the flocks of Herefordshire, Worcestershire and Shropshire, and Leominster was the market centre to which it was sent. The Midland Counties produced big sheep, with coarse wool, while the Lincolns produced the coarsest of any. Welsh fleeces, apparently, were

inferior, and the sheep of the Principality were to be "praised only in the dish, for they are the sweetest mutton."

Flock management on the inclosed farms differed very little in the fifteenth and sixteenth centuries from that which is practised today. Fitzherbert, writing in 1523, gives a comprehensive description of everything that a good shepherd would be doing and thinking today. He discusses the times at which the ram should be turned in with the ewes, when lambs should be weaned, the need for daily examinations for attacks of fly and how to treat for them, how to mix tar for treating scabbed sheep, and how to identify and deal with all the diseases with which the modern shepherd is familiar, and more. June was the time for shearing, and "er they be shorne, they muste be very well washen, the which shall be to the owner great profyte in the sale of his wooll, and also to the clothmaker." The sheeps' heads must be held high enough to prevent drowning. The shepherd must always be ready with his tarbox to salve any that are pricked by the shearers, and he must see that they are earmarked, pitch-marked and raddle-marked after clipping.

It must not be supposed that the Tudor inclosures affected all the country. The closeness of settlement and the intensity of arable farming varied considerably in different parts of England. In all the hill districts, in Cornwall and Devon, in Wales and the Pennines, particularly, population was sparse and the nature of the country and its climate did not lend themselves to the development of open-field arable farming. Thus, while this system occurred in one form or another in most of the counties of England where topographical conditions were suitable, it was by no means universal. The great Midland plain, from Berkshire and Gloucestershire to Stafford and Notts, was the centre of the system, and it was here, particularly in Warwickshire, Northamptonshire and Leicestershire, that the Tudor inclosures were most manifest. Taking the country as a whole, the area of land inclosed from the open fields during the first period of commercial farming was relatively small, although its effects on farming and society in

the districts in which it occurred, were considerable. It has been estimated that during the Tudor period the acreage inclosed and laid down to pasture was well under a million acres, and that less than 50,000 people were thrown out of work as a consequence. Nor was the distress amongst the rural population of the times attributable entirely to this cause, for the disbanding after the Wars of the Roses of the retinues formerly maintained by the great feudal lords, followed by the suppression of the monasteries, deprived many people of their livelihood. Lord Ernle says that monastic lands came into the hands of new owners who recognized no titles derived from their previous possessors, and they entered upon their new estates as though they were vacant of tenants and available for inclosure or occupation by them as sheep runs.

Again, it must not be supposed that all the Tudor inclosures were arbitrary or oppressive, nor were they made universally for sheep farming. There were many voluntary agreements entered into between landlords and their tenants for the commutation of rights of common, and also, with the consent of the lord, between farmer and farmer for the exchange of strips, so that each could have his arable land in blocks large enough for inclosure and farming in severalty. On the whole, however, the Tudor inclosures are not notable for the contribution which they made to an improved technique of arable farming and crop production. Rather do they mark the emergence of the business man in agriculture, the man who could seize an opportunity to make money out of the particular circumstances of his time. Such men had always been in evidence, for while open-field farming, organized mainly for subsistence, tended to restrict the enterprising and to check the pace of progress, there was no dead level of uniformity amongst farmers, and those who farmed better than others were able to collect larger holdings and to produce marketable surpluses. It was they who went ahead when inclosure gave them the chance to develop their individuality to the full, and it was the mediocre performers, as well, of course, as the idle and the thriftless of the community, upon whom inclosure bore

hardly. Of course, unlawful or even high-handed action by the lords in their pursuit of the profits of the wool trade, struck alike at the good and at the indifferent amongst their tenants. There is plenty of evidence of it. But at the end of the two centuries which finished with the last of the Tudors, English farming emerges as being well set upon the road of commercial expansion under the more progressive landlords and tenants, even though in many hundreds of manors unaffected as yet by the urge to inclose, the standard of performance was still generally low.

#### THE SECOND AGRARIAN REVOLUTION

As has been said already, it is impossible to date the great changes and improvements in agricultural practice with any precision. Even where dates can be assigned to certain events, such as the introduction of drill husbandry or of a new crop, or the invention of a reaping-machine which worked, the time lag between the perfecting of an agricultural invention, or of a farming system, and its adoption generally by husbandmen, may extend to decades or even generations. The rate of progress varies, too, within limits equally wide. In times of prosperity, the investment of capital by landlords and farmers has been considerable and technical progress has been rapid, with a reversal of all this in times of depression. These facts must be borne in mind in considering the technical development of agriculture from the time of the swing-over from mere subsistence farming to the combination of this with production for the market, and, finally, to an agricultural organization based almost entirely on production for sale. Evolution has been continuous, even though it may not always have spelled progress. Let us consider, then, what have been the technical advances in farming since the growth of the wool trade, and opportunities for money-making in the days of the Tudors stimulated the first changes in an almost age-old farming tradition.

From early in the seventeenth century until the latter part of the nineteenth, the pressure of a growing population on the

food resources of the country was influencing the development of agriculture, and the great increase in the number of food consumers associated with the industrial revolution gave a stimulus such as farmers had never experienced before. Little food was available from the Continent or the East, except in the form of non-competing commodities, while North America and the other countries of the New World were entirely undeveloped. The main objects of landlords and farmers, therefore, were to increase the area of land under cultivation by every means possible, and to raise the productivity both of land and labour. So we find a new drive for the inclosure of open fields and for farming in severalty ; great ventures in arterial drainage and the reclamation of wastes ; the introduction into this country of crops new to it which would increase food supplies, both directly for human consumption and indirectly as fodder crops for farm livestock ; great progress in the improvement of the native breeds of livestock ; the evolution of a new science of the maintenance and improvement of soil fertility ; and all the time the introduction of implements and machines designed to lighten toil and increase the output of the manual worker. Let us consider the improvers and their work, under this general classification.

#### *The Passing of the Open Fields*

The inclosure of parts of the open fields, stimulated by the shortage of labour following the Black Death, and by the growing profitableness of the sheep industry in Tudor times, became more and more general throughout the countryside as the opportunities for commercial farming increased. Progressive farmers had become restive under a system which prevented them from cropping their land to suit their opportunities and defeated all their attempts to improve their strains of livestock, and as the seventeenth and eighteenth centuries passed, more and more land was taken out of common cultivation for farming in severalty. It has been pointed out already that there had been no increase in open-field cultivation for long years before, as is witnessed by the layout of the new land

required by the growing farming community in the form of closes ringing the big fields, rather than in new strips and furlongs added to them. Inside the open fields, too, exchange of strips and consolidation of holdings was always going on, here and there, between individuals. By the end of the seventeenth century, the demand for inclosure had grown to such a pitch that these methods did not suffice, and the practice of open-field farming was being abandoned in many places under a variety of private arrangements between the parties concerned. Even this, however, was too slow and uncertain to meet the need. Private arrangements were sometimes impossible, owing to recalcitrancy or to the legal disability of one or more of the parties—a minor perhaps—and even where effected they were sometimes upset subsequently by applications to the courts. This last difficulty was overcome by registering voluntary agreements in the Court of Chancery, but there was still the problem of the obstructionist, and early in the eighteenth century the practice began of inclosure by private Act of Parliament. Bills were promoted by the parties interested for the appointment of commissioners to survey the open fields and meadows of the parishes in question, and to allot the land in severalty to the claimants, according to the rights which they had established. Provided that agreement amongst the owners of not less than four-fifths of the land involved could be shown, the passage of bills through the House was little more than a formality.

Once an Act had been procured, the rest of the work devolved upon the commissioners appointed by it. Generally they were men drawn from the locality, some of whom functioned only for one inclosure, while others seem to have made a profession of the work, for their names occur in several Acts. Claimants were invited to send in statements of claim by a date appointed, and anyone who could establish a right of any kind received in due course an allocation of land for his several use and occupation proportionate to the right which he had established. The system worked well enough for the larger claimants. They got their blocks of land which they

could fence and lay out in farms and fields and equip with houses and homesteads for letting or for their own occupation. But for the smaller partners in the village farms, inclosure often meant a complete change in economic life. The right to a few strips of ploughland in each of the open fields, a few strips of mowing grass in the common meadows, and the right to graze a few sheep after corn and hay harvests in the great open fields and the meadows might not, in themselves, provide a life and living. The small freeholder had often to supplement his farming with work for wages. But he had a part-time holding, which with thrift and good luck he might increase by renting more and more strips, until he became a full-time farmer. Such experiences were common in the open fields, and although the allotment of a few acres of land in some remote corner of the parish might represent, perfectly fairly, such a man's share in the total, they did not give him the same opportunity. His little piece of land needed fencing before he could use it, and it was too small to enable him to grow a rotation of crops and at the same time to provide for his score, perhaps, of sheep, which had managed to get a living on the stubbles and fallows of the open fields, or for his cow on the common. There is evidence to suggest that some of the claims disallowed were submitted by persons who were too ignorant to know how to substantiate them, but the weight of the charge against the methods of the inclosure of the open fields lies, probably, less in actual injustice than in the undoubted fact that a large number of the village community lost their stake in the land, and with it vanished, also, all opportunity to climb the economic ladder. Their little allotments of land had to be sold, and they became whole-time workers for wages. Some of them stayed on the land to work under the poor conditions which were all that a scattered, unorganized body of workers could secure in the eighteenth and nineteenth centuries ; others migrated into the towns to augment the growing army of industrial workers. In either case, the change of status meant a loss of independence and of economic opportunity for the great majority.

Consolidation of holdings, with the definition of farm boundaries and of the fields within them which followed, altered the face of the country. There is evidence, much of it ocular, that in making their allotments of land to the successful claimants, the commissioners followed, so far as possible, the boundaries of the furlongs displayed in the open fields. That is to say, a freeholder entitled to an allocation of 160 acres of ploughlands did not receive a rectangular block of this size, as he might have done were he taking up virgin land in the prairies. Rather were the commissioners at pains to give him a group of the existing furlongs approximately of this extent, for by this means they avoided cutting across the ancient layout of the land for cultivation, which had been designed to take advantage of natural features. Any other principle of dividing the land would have caused a good deal of confusion, with little or no compensating advantage. By dealing with each of the open fields in turn when it was in fallow, interference with the course of cropping was avoided, and the inclosure was carried through with the minimum of inconvenience to husbandry.

The larger allottees proceeded to subdivide their new holdings into farms, following, again, the outlines of the furlongs in the sub-division, and the fields which they made within the farms consisted likewise of one or more of the old furlongs. The advantages of adopting these boundaries are obvious, while at the same time it explains the irregularity and seeming inconvenience of the layout of so many farms and fields today. Since the inclosure, there has been some engrossment of farms by consolidation of smaller holdings and the purchase of small allotments, while here and there fields have been enlarged by the removal of fences. Otherwise, farming today is practised on the little farms and in the little fields which originated upon inclosure, regardless of the great changes which have occurred in the instruments of cultivation and the sources of power available today to the farmer. According to the Agricultural Statistics, there are about 366,000 agricultural holdings in England and Wales, and

some 150,000 of these, or more than 40 per cent do not exceed 20 acres in size. Of the remaining 216,000, 66 per cent are farms not exceeding 100 acres.

The Inclosure Commissioners' Award included a delineation of the roads which the new layout would necessitate. Some of these were no more than the old tracks and bridle-paths crossing the open fields from one village to the next, or meandering through them, round headlands and along the rough uncultivated spots, to give the farmers access to their strips. Others were new, dictated by the requirements of the new layout. The two types can often be identified today ; the former twisting and turning round what were obviously furlong ends, the latter running straight from point to point,

The award usually contained, also, instructions for the fencing of the allotments, but this did not extend to the fencing of fields within them, which was left to the discretion of the allottee.

Between the years 1760 and 1815, upwards of 1800 Acts were passed through Parliament for inclosing open arable fields and meadows. The acreage of land involved differed greatly in different parts of the country, that in the Midland and Eastern Counties far exceeding that elsewhere. In Lincolnshire, for example, 445,000 acres were inclosed, in Northamptonshire 308,000, while in Sussex the extent was 15,000, in Cheshire little more than 3,000 acres and in Kent, Devon and a few other counties, none at all. This is not to say that in the counties of little or no inclosure, open-field farming continued ; on the contrary, the explanation is that inclosure had been effected earlier.

#### *New Land for Farming*

The expansion of the farming area necessitated by the slow growth of population, had been continuous from the earliest days of recorded history. In the counties more predominantly ploughland, say those mainly of the southern half of the country, the lords of the manors and their tenants were constantly encroaching upon the woodlands and wastes in

earliest times to add new strips and furlongs to the open fields, and then, as the advantages of farming in severalty came to be realized, to surround the big fields with little fields or closes. Such inclosures were of advantage to the people, as making room for new settlers and giving more scope to old ones ; they were of advantage to the lords as giving them land free from the restrictions of customary tenancy, for which they could exact a competitive rent. In the more remote and less populated parts of the country, in which pastoral farming prevailed, the same process went on unorganized and at haphazard, as is disclosed today by many of the hill farms in their layout amongst the surrounding moors and fells. Later, however, that is to say in the seventeenth, eighteenth and nineteenth centuries, land reclamation in many places was organized more methodically and often on a much more ambitious scale. The inclosure and clearing of large areas were carried out as planned enterprises, the work of wealthy men acting under expert advice. Nevertheless, the piecemeal accretions were going on at the same time, and Edward Lawrence, agent to the Duke of Buckingham, writing in 1727, urged stewards to keep a watchful eye on such inclosures by tenants upon the outskirts of the farms so as to secure the profits of them for their masters.

The larger works of land reclamation fall roughly into two categories ; there were the areas of marsh and fen, calling for the application of engineering science to their drainage, and there were the great woodlands and wastes which hitherto had not attracted the husbandman, calling for felling and clearing.

At many places on or near the coast, areas of marshland, some of them very considerable, exist. Most have been formed in the process of centuries, at what were once the mouths of rivers draining the higher land behind them. Thus were created the Lincolnshire Fens, where the rivers draining many of the East Midland Counties come together to discharge their turbid waters into the Wash. The mud they contained was precipitated on meeting the tides, and in the course of long ages the deposit on its landward side accumulated until, at length, it was submerged only at the highest tides. The

mouths of the rivers were pushed farther and farther eastward through the mud flats which they themselves had created, and slowly vegetation made its appearance on the higher spots. Once begun, this natural reclamation proceeded more rapidly as the herbage arrested the mud of every fresh inundation, and so the great fen lands gradually emerged, pushing slowly eastward, as they are still doing today. The same process went on in many other places. The rich alluvium of Romney Marsh represents the accumulated deposits of the River Rother after its journey through the Weald of Kent and Sussex ; the marshes round Bridgwater are similarly associated with the drainage of Somerset highlands by Parret and Axe ; while farther north, on both sides of England, other examples occur. At various times in what, by comparison, can be called the recent history of these districts, man has stepped in to assist nature, sometimes to speed up this accumulation of new soil, but more often to remove the excessive moisture in it, by drainage works, to bring it under cultivation.

The Romans have been credited with the earliest efforts at reclamation of the slob lands, but it was not until the country was well settled and the population was increasing, that anything really effective was done. Then it was the Church that was the organizer. Thomas à Becket and other Archbishops of Canterbury reclaimed the marsh lands west of Romney Marsh, in successive areas which still bear their names, while another Archbishop, John Morton,<sup>1</sup> when Bishop of Ely, cut a great drain from Peterborough to Wisbech, Morton's Leam, which still functions usefully.

It was not until the beginning of the seventeenth century, however, that the problems of the drainage of marsh and fen were seriously tackled. The Government entered the field, surveys of the Fens were made, commissioners and courts of sewers were appointed, and a Dutch engineer, Cornelius Vermuyden, experienced in the removal of water from the submerged districts of his own country, was brought over to

<sup>1</sup> Better known, perhaps, as Henry VII's Chancellor and the deviser of "Morton's Fork."

advise. It must not be supposed that the Fens were trackless uninhabited wildernesses. Those of Lincolnshire and the counties adjacent on the south, extending to some 700,000 acres, had a hardy, if small, population who lived by wild-fowling and fishing, and moved freely about the district by paths which they alone knew. Moreover, there were islands in the marshes, spots raised a few feet above the general level which had long been settled, by reason, no doubt, of the great fertility of their soil. Most of them were Church lands, and their names are associated with some of the wealthiest religious foundations of pre-Reformation days—Ely, Thorney, Ramsey and Crowland for example, and Peterborough, the “Golden Borough.”

Vermuyden began work in 1626 on Hatfield Chace, a great expanse of peat bog south of Doncaster. In 1630 the fourth Earl of Bedford and local landowners associated with him formed themselves into a company of adventurers and contracted with the great Dutch engineer for the drainage of a large area of the Fens now known as the Bedford Level. The works constructed then and improved at various times since, must be seen to be understood, and few things in this country are more impressive than the magnitude of the conception and of the works involved in its execution. Briefly, the principles of the schemes were to cut catchwater drains at the foot of the higher lands which were always pouring their surplus rainfall down on to the Fens, and this could then be led away to discharge into river or sea without adding to the natural wetness of the marshes. A system of dykes was then planned and carried out by which the water on these great levels, having no natural fall, was carried off by small ditches which were collected into larger watercourses, and then led to convenient points alongside the Fen rivers. Here the water contained in the watercourses was lifted over the river banks by big scoop-wheels operated by windmill power, thus being artificially discharged. The rivers themselves often had to be enlarged and straightened, and here and there great new watercourses—rivers themselves—had to be cut to take the

water. The work was not finished for more than twenty years, and only in the teeth of strenuous opposition from the *fennmen*.

The possibilities of this sort of land were now understood, and improvers all round the coast began to follow the example and methods displayed before them. Notable areas, such as the Isle of Axholme, the Somerset marshes and the Lancashire Fylde were reclaimed in the same way, thus increasing the sum total of the farming lands of Britain.

Reclamation of land from the sea is still going on at certain points round the coast, for the rivers are still bringing down the mud they have collected and depositing it at their outfalls. Every bather is familiar with the mud flats which spoil his sport at certain seaside places; and these are nothing more or less than the potential farm lands of times to come. Where the deposit is plentiful, as along the shores of the Wash, it is the practice of the local farmers when certain signs appear, particularly the growth of sea-loving plants on the mud, to cut off areas of it from further flooding by the sea, with walls or banks. Sluice-gates in the bank enable them still to admit flood water at high tides, and by allowing this to stand for twenty-four hours before discharge, the mud content is deposited, the water is discharged clear and the process of putting the finishing touches to the natural accretions of soil is speeded up. At a given level, further flooding is stopped, drainage ditches leading to the sluice-gates are cut and the surface water is discharged automatically by them at low tide. In the regions in which reclamation of this kind is going on, the progress of the work through the past few centuries may be observed in the series of sea-walls or banks running parallel, one beyond another, on the landward side as the coast approached.

In Lincolnshire and South Yorkshire, this river mud is known as "warp," and the process of its accumulation is called "warping." The River Trent, fast flowing and muddy, is tidal as it approaches the Humber, and it runs through a low-lying region largely of peat, of which Thorne Moors are typical. Much of this district has been converted into some of the finest farming land in Britain by warping. In areas of



Plate 5a Inclosure Surveyors at work, Henlow, Beds

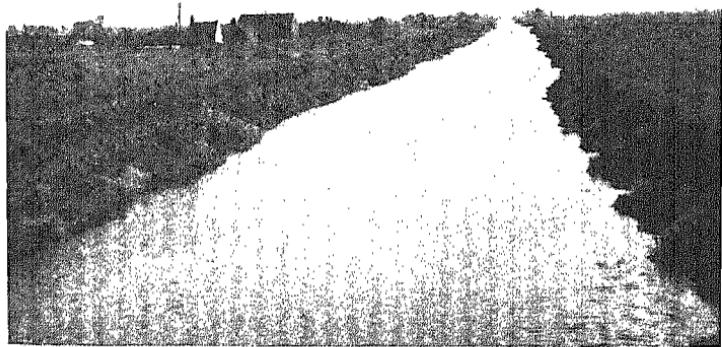


Plate 5b Hundred-foot Drain, Lincolnshire Fens



about 500 acres the peat is dug out to a depth of a few feet below high-water level for use for various commercial purposes. Sluice-gates are then built on the river side and a warping drain is cut connecting them with the river. As the tide rises, the muddy waters of the estuary open the sluice-gates and fill the excavation ; as the tide recedes, the gates close, and the mud is precipitated in the still water. At the next tide, when the gates open again, they are fixed so that the clear water can run off, leaving a thin film of mud at the bottom of the excavation. The process is repeated daily, perhaps for two or three years, by which time 500 acres of peat bog has been turned into that extent of the finest alluvial soil. Drainage ditches are cut, leading to the sluice-gates, and these, together with the warping drain, now become the means for clearing the area of surplus water.

By contrast with the drainage of the Fens and the reclamation of many marshland areas around the coast, the acquisition of land for farming by warping is insignificant. The land recovered, however, is of the highest fertility and makes its contribution as a set-off to the constant encroachments of industrial development upon the nation's agricultural area. With all the resources of modern machinery for moving the soil rapidly and in large quantities, there are already indications that reclamation from the sea may be more extensive and more rapid in the future. In the summer of 1948 a group of farmers on the shores of the Wash were responsible for a reclamation scheme which will add some 3,000 acres of new land to the cultivable area of Lincolnshire, when subsidiary works such as draining and levelling have been completed. Contractors equipped with bull-dozers, drag-line excavators and dredgers, starting from either end of a twelve-mile stretch of coast, built two great sea walls, each about six miles in length, to join up with each other and to keep the sea from further inundation of this great tract of fertile mud. The wall stands on a base of sixty feet and projects ten feet above the water level. When grassed over it will stand firm against any disintegrating conditions which it is likely to meet.

Other schemes are contemplated in the same coastal region, for work which would have taken many years under the old conditions of labour organization can be accomplished, apparently, in a few months with modern mechanical aids.

Rural England of the eighteenth century presented an appearance very different from that which it shows today. Although the big drainage schemes of the Eastern Counties and elsewhere had been carried out and the land was in agricultural use, and although the majority of the open arable fields had been inclosed and relaid out in compact farms and small fields much as we see them today, many of the common grazings associated with them had been omitted from the scope of the Inclosure Acts and were still open. Moreover, there was still a good deal of land in woodland and waste, of which there are few traces now. These were the areas, often of poorer lands, which had not been attractive to farmers so long as there was plenty of room for all on better land. Moorlands, commons, hillsides and woodlands all made their contribution in some form or another to the life of the community. They provided rough grazing, if only in the summer-time ; they yielded turf and scrub for fuel ; and the woodlands, of course, timber for all purposes.

As the eighteenth century progressed, however, and the rapid growth of the industrial population made ever-increasing demands upon the nation's food-producing capacity, the possibility of reclaiming many of these marginal areas had to be considered. There was no organized scheme promoted by landowners in general and backed by the resources of the State, such as had led to the reclamation of the Fens, but here and there, all over the country, landowners who had reaped the advantages of the inclosure of the open fields began to turn their attention to the inclosure of commons and wastes. These may be said roughly to have been of two types. First, there were the common pastures, often not very extensive, associated with the open arable fields and the village community. Grazing rights upon them were often strictly regarded, being attached to certain classes of the community or even to certain

houses, and limited in their exercise to certain classes and numbers of livestock. The value of such carefully stinted commons is indicated by the frequency of the presentments for infringement made at the Manor Courts—overstocking, trespass, turning out unauthorized classes of livestock, removal of soil and turf and so on. Second, there were the large areas of wastes and woodlands referred to above.

The procedure on inclosure was the same in either case. Bills were promoted in Parliament; Inclosure Commissioners were appointed, before whom those who asserted any rights whatsoever on the commons concerned had to establish the legality of their claims. Allotments were then made, just as with the open fields, proportionate to the value of the rights established, and the allottees would then proceed to fence off their land, and the common, as such, ceased to be.

By this process land came into individual occupation for better cultivation and increased production. There can be no doubt, however, that inclosure resulted also in hardship to certain classes of the community, just as the inclosure of the open fields had done, and that a certain element in the local population was deprived of a certain hold upon the land and the first step up the rungs of the agricultural ladder. It is true that Arthur Young and other writers of the late eighteenth and early nineteenth centuries were emphatic in their condemnation of the large commons which still existed. Wherever you find large tracts of common grazings and lands with other rights of common, they tell us, there you find the poorest classes in the agricultural community, shiftless, unthrifty people eking out their livings by what they can scrape together by their rights of common, working only under direst necessity, and often dissolute and lawless. It is impossible to disregard this evidence from reputable contemporary observers; at the same time, there were other elements amongst the people affected by the inclosure of the commons, those who lost valuable opportunities for getting together the livestock and cash capital which might have helped them to become small farming tenants in due course. This was particularly true of the village

commons, places where rights were jealously guarded and well regulated. On others, the larger wastes, squatters and persons with no legal rights of any kind trespassed freely and exploited the common in every way, to the injury of *bona fide* commoners and the subversion of law and order. Such people were weeded out upon inclosure, by their failure to establish any legal rights.

At the same time, there were commoners who lost valuable privileges under an Inclosure Award. Some of them had been unable, owing to ignorance, to establish claims which were perfectly good ; others had such claims disallowed. Even an allowed claim might not differ very much in result from one rejected. The cash payment sometimes made in lieu of a small right was soon spent in the absence of opportunity for investment, while an allotment of a little bit of land carrying with it an obligation to pay a proportion of the commissioners' costs, added to the expense of fencing a plot which was no real alternative to a share of the common pasturage, was of very little value. Contemporary writers, even those most zealous for inclosure, admit freely enough that some of the community, and usually its humblest members, suffered irreparable loss when the grass commons were inclosed, because, however effected, it entailed the loss of their livestock. "For whom are they now to be sober or to save," inquires Arthur Young, "'If I am diligent,' they ask, 'shall I have leave to build a cottage? If I am sober, shall I have land for a cow? If I am frugal, shall I have half an acre for potatoes? You offer nothing but a parish officer and a workhouse. Bring me another pot.'"

Records of the proceedings before inclosure may be found, now and again, in the form of statements of claim, with the commissioners' notes thereon and other data. At Dunkeswell, in Devon, for example, an Act was passed in 1801 "for dividing, allotting and inclosing all the Commons and Waste Lands within the Manor and Parish," and the Award was issued in 1818. The claimants were of two classes ; first, those who had made encroachments upon the common for cottage building, gardens or husbandry, and who desired to have their encroachments legalized ; second, those who claimed the right

to graze livestock, the right to cut turf for fuel (*turbary*), and the right to take soil ; all claimants desired allotments of land in lieu. Nearly all the claims to establish possession of encroachments were disallowed. Those which the Commissioners allowed generally had some obvious justification, such as that of Thomas Drew, who established that the perambulation of the waste had gone outside the parish of Dunkeswell, and that the subject of his claim lay in the adjoining parish of Broadhembury ; or like that of the parishioners of Hemyock, who maintained successfully that the subject of their claim was in their own parish, and that it had been included in the area perambulated and marked out as belonging to Dunkeswell "by means of some false information." As to the claims to use the commons and waste for pasture, turbary or for taking soil, one in four was disallowed out of a total of sixty-four, but all but two of the unsuccessful claimants had failed to establish their rights to the encroachments they had made on the common.

It may be taken for granted, however, that those whose rights were recognized, and who got substantial allotments of land, made good use of them. The land was parcelled out in fields, and equipped with homesteads necessary for working it, and the practice of an active system of husbandry displaced the meagre contribution of a natural pasture which it was nobody's business to tend or to improve.

Most of the commons and wastes inclosed and reclaimed for agriculture were areas relatively small. Here and there, however, large stretches of barren land were attacked. Such a one was the Royal Forest of Exmoor, where some 20,000 acres of rough, treeless grassland, a high plateau without roads, fences or population, contributed nothing to the nation's food supplies beyond a few months' summer grazing for store stock. In 1815 an Inclosure Act was passed, an inquiry was held by commissioners to enable persons to establish grazing and other rights, and then the forest was allotted to the successful claimants in proportion to the value of these rights. The Crown got 10,000 acres, which were then put up for sale, the buyer being Mr John Knight, a rich ironmaster from the

Midlands. He was able also to buy most of the other half of the Forest, and he set to work to reclaim it. Great difficulties had to be overcome. A few inches below the surface was a clay and iron "pan," which made the soil wet, and there was no lime in the soil, which made it sour. Further, the elevation, running up to some 1,500 feet, gave the district a climate unfavourable to corn-growing. Deep ploughing and liming resolved the first two difficulties, and much of the land was inclosed and equipped as farms and put under cultivation. For some years the landlord himself, followed by a succession of tenants, sought to establish a corn-growing rotation on these high lands, but the climate defeated them, and the venture finally justified itself in the form of stock-raising grass farms. If the cost of this work were capitalized, the enterprise would stand condemned as a commercial venture ; but it has resulted in giving the country a new parish, the largest in area in the county of Somerset, in establishing a new community, living hard, no doubt, but content with their lives, and adding many-fold to the former contribution of the forest to the food production of the country.

This experience, though rather extreme both in its scope and in its cost, was fairly general, it may be supposed, on many of the larger reclamation schemes of the early nineteenth century. The need for more food, leading to much prosperity in farming, stimulated persons here and there to attack similar big enterprises, and in one place the State itself took a hand when the commissioners of Crown lands undertook the reclamation and inclosure of Wychwood Forest, in Oxfordshire. The truth is, of course, that land, raw, uninproved and unequipped, is worth little or nothing, and that the value of farm lands today is due almost entirely to what man has spent upon them by the investment, often prodigal, both of his labour and of his capital.

#### *New Crops and Rotations*

It has been pointed out already how closely connected were the growth of commercial farming and the spread of inclosure.

Freedom to take advantage of new crops just becoming known, and thereby to change the three-field rotation for one making more economic use of the land, was impossible so long as the ancient custom which turned all ploughlands into common grazings at certain seasons continued to be enforced. Here and there, attempts were made to meet this difficulty through voluntary agreements to abolish this custom, and although the open fields, with farm holdings made up of small strips of land scattered throughout them, remained, a great step forward had been taken towards the enfranchisement of the progressive farmer from the shackles of an archaic routine, when the grazing rights of those who cultivated them had been abolished. He was then able to undersow his spring corn with the new clover seed, or to plant his strips in the year's fallow field with turnips, the new winter forage crop which was just becoming known, secure in the knowledge that neither clover nor roots would be devoured by the livestock of his less progressive neighbours. At the same time, the heavy cost of an Inclosure Act and of the subsequent survey and allotment of lands was avoided. This expedient did nothing, it is true, to protect the interests of the smallest type of tenant, for it entailed the loss of the livestock which hitherto he had maintained on the common arable fields for nothing, but it opened up the way to higher food production and better farming. Examples survive in the parishes of the Isle of Axholme, where strip farming on the rich alluvial soil—but without common grazing—continues to this day, and each man follows his own rotation without regard to the cropping of his neighbours. Even so, the system, thus revised, does nothing to remove the obvious handicaps on the best use of labour. In fact, nothing short of a general inclosure policy could have sufficed to meet both the opportunities opening up before the farmers, and the needs of the growing mercantile and manufacturing elements in the population for more food.

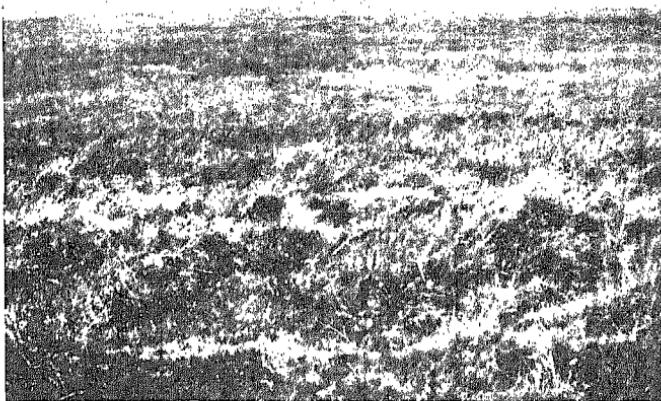
According to Lord Ernle, the revival in arable farming in the seventeenth century was stimulated largely by the great developments in horticulture and the intensive cultivation in

private gardens of new fruits and vegetables from the Continent, which had characterized the Tudor period. In the reign of Elizabeth gardening had taken the place which it was never to lose, as one of the pleasures of English country life. It gathered round it a rich literature, and though its useful side was neglected for a time by the Tudor gentry, the culture of vegetables progressed steadily from the latter part of the sixteenth century, when potatoes had hardly found a place except in rich men's gardens, and were still unknown as a farm crop.

The new crops of outstanding importance in English agriculture were the clovers and turnips. Turnips had long been grown in gardens before they reached the farm. To Lord Townshend, a Norfolk landowner, who flourished in the first half of the eighteenth century, must be given the credit for popularizing turnip cultivation, which was to save the farmer from the yearly cost of keeping a third of his land in bare fallow, while giving him a new and abundant winter food supply which was to revolutionize the keeping of livestock throughout the country.

The introduction of clovers and grasses into the farming rotation had preceded cultivation of turnips on the fallows. For this, Sir Richard Weston, a Surrey landowner, was largely responsible, and these two crops led ultimately to the elaboration of the famous four-course rotation in Norfolk by Townshend, when the cropped fallow had taken the place of the bare fallow, and clovers and rotation grasses had been introduced to follow the spring-sown corn crop. The effect on food production was very great. The clover crop meant more hay and more grazing; the turnip crop meant winter keep; the combination of all meant more livestock; more livestock meant more meat and more manure—and more manure meant more corn.

It is difficult to assign dates and names to these improvements, though they were of first-class importance. They were part and parcel of a gradual extension of the range of cropping in the seventeenth and eighteenth centuries, and of a general



Exmoor Forest as John Knight found it



Exmoor Forest as John Knight made it

Plate 6

*From "The Reclamation of Exmoor Forest"*



Plate 7 The Howick Red Ox  
*Drawn and engraved by Baile, 1788*

agricultural revival which went hand-in-hand with the improvements in tillage and in tillage implements which are associated with the name of Jethro Tull. There is not much evidence of any attempts at this time at plant breeding. Rather were farmers indebted to travellers and to others whose work gave them opportunities of intercourse with the Low Countries, for the chance introduction of new crops. Nor must it be supposed that their adoption was rapid and general, for it took long years before the value of the turnip was recognized or the potato was to be found in universal cultivation.

#### *The Livestock Improvers*

The need for inclosure of open fields and common grazings was manifest more perhaps in the condition of the livestock of the country than in any other part of the system of husbandry. There is overwhelming evidence that the land was often overstocked and cattle and sheep half starved, and that attempts at breed improvement or the control of disease were stultified where stock grazed in common, for selection of sires was impossible, and one scabby sheep could infect the flocks of a parish. Everything that could be done to mitigate these evils was done. By-laws restricting the stocking of common fields and pastures were precise and stringent, and infringements were punished in the Manor Court. The use of certain pastures was often reserved to particular classes of stock. Sheep and horses crop so close that they will starve cattle grazing with them, and so sheep pastures, horse closes and cow commons were designated. This made more economical use of the available grassland, but it did nothing to remove the difficulties in the way of livestock improvement, for everyone's flocks and herds were still intermingled.

Improvement of livestock was part and parcel of the general advance in farming recorded in the eighteenth century. It has been shown how inclosure was associated with the introduction of new crops and the evolution of better crop rotations. The management of livestock, facilitated by the occupation

of small inclosures in severalty and the now abundant supplies of winter keep, made rapid progress in the hands of a few as a part of the new technique. But just as the cultivation of the new crops spread over the country only by slow degrees, so the methods of the pioneers in livestock improvement took time in becoming known and practised. The livestock improver, however, had something to sell, which the grower of turnips or rotation grasses had not. Whereas turnips and rotation grasses were grown for consumption on the farm, the breeder of better horses had something more than farm work in his mind. He had stallions which could travel the neighbourhood. The breeder of better cattle was not thinking merely of improving his dairy herd and his beef cattle. He had bulls to sell. So with the flockmasters, stock which in the ordinary way would have been shorn for wool and then turned into mutton, was reared for sale as ewes and rams of the improved breeds, to fulfil their mission of improving other people's flocks. The livestock improvers, therefore, drew profits from demonstrations of their work, and their neighbours could also profit by it, directly and speedily.

Such contemporary accounts as exist suggest that the general standard of farm livestock at the end of the seventeenth century was low. Sheep were kept as much, or even more, for their wool-bearing qualities and as four-legged dungcarts for fertilizing the arable land, as for mutton. The wool trade was in a state of great activity, and practically the only manuring which the open fields got was supplied by the sheep which ranged over the stubbles and fallows. Cattle were in demand for draught purposes, and contemporary prints and pictures bring out clearly the emphasis placed by the breeder on heavy shoulders which were valued for the yoke, rather than on the loins and rumps which are esteemed for the table. There were no breed societies, no agricultural shows at which the livestock judges could indicate the standards to be aimed at by the awards they made.

The different breeds of livestock, particularly cattle and sheep, were identified with different districts. Over the greater

part of the Midlands and the west of England, from Cumberland to Dorset, the Longhorn cattle, now nearly extinct, prevailed without challenge right up to the end of the eighteenth century and later. Within this area were local breeds, less widely diffused, such as the Hereford, the Gloucester and the Glamorgan. These suggest a common ancestry with the Longhorn, for, without having that striking development, there was much general similarity in the four breeds, and all of them show the conspicuous "finch-mark," the white line or stripe running from the head down the back to the tip of the tail. All of them were brindles, blacks or reds, and many of them patched with white.

The South of England had evolved two red breeds, the Devon and the Sussex, and in the Eastern Counties, red cattle without horns, the Redpolls, pervaded Norfolk and Suffolk. Over the rest of the country, from Durham down to Lincolnshire, the foundation stock of the breed which has come to dominate all others, the Shorthorn, was prevalent. Its home, probably, was in County Durham, and it was as the Teeswater, or the Durham, that it was first known.

Sheep types were equally widely diffused. They could be divided primarily into two classes, the longwools and the shortwools, the former predominating. Almost every hill in the Pennines and the Welsh Mountains had its local variety, many of which have survived to the present day. On the other hand, a few varieties, far better known and some of them more important nowadays, such as the Oxford Down and the Devon Closewool, did not exist at all, for they are the products of the nineteenth century breeders' skill in crossbreeding to fix new types having particular points and qualities.

Oddly enough, horses and pigs, important as they were in far more than the economy of the farm—the former for all forms of transport, the latter as supplying the principal meat diet of the nation—do not seem to have evolved so many local types as the other stock by the eighteenth century, nor were the early livestock improvers so much concerned with them. The hill districts had, many of them, their own pony

breeds. Yorkshire, then as now, was a county of horse-lovers who had the foundation stock of the breeds known later as the Cleveland Bay and the Yorkshire coach horse—heavy animals, but active, equally at home in the plough, in coach harness or under the saddle. The thoroughbred was just evolving under the stimulus of horse racing, the product of Arab crosses on native light-bred stock. For the rest, there was a nondescript type of heavy horse, which had been used indifferently in earlier days to supplement oxen for farm work or to carry a man-at-arms, and later for farm work and for heavy transport on the country's still unmetalled roads ; and a lighter-bodied, lighter-legged horse, used alike for the pack-saddle and for riding, which had probably been developed from native pony breeds crossed with something heavier.

As for pigs, they were found all over the country. There is evidence that the indigenous stock was generally sandy or red, and that the type was long-legged, heavy-shouldered, and lacking the loin and ham development of modern breeds. Except in colour, it conformed more to the characteristics of the wild pig, still preserved in parts of Europe, in which the head and shoulders form half the animal.

The earliest evidence of a real interest in the improvement of livestock dates from the beginnings of the eighteenth century, by which time the development of crop husbandry, particularly in the direction of fodder crops, had greatly increased the stock-carrying capacity of the country. The Longhorn cattle were the first to be dealt with. So far as can be ascertained, there was no generally accepted standard of shape and make for them or for any other breed, nor had there been any attempt to develop some strains of cattle for milk production and others for beef. The great dairying industry of the present time was not even in its infancy in the early years of the eighteenth century, but milking qualities were important in all breeds for cheese manufacture, one of the staple winter foods, so that the improvement of milking capacity, both in quantity and quality, seems to have been the first objective. In 1720 a Derbyshire landowner, Sir Thomas Gresley of Drakelow,

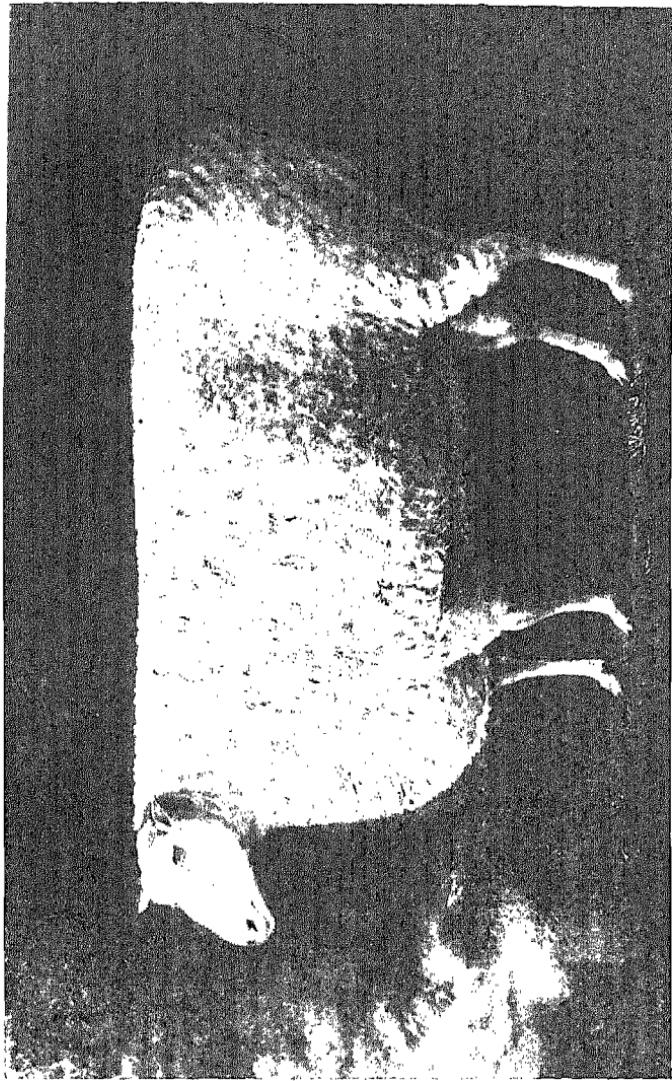


Plate 8 Bakewell's Improved Leicester Ram *Tuppounder*  
*From the painting by J. Digby Curtis in the Agricultural Economics Research Institute, Oxford*



Plate 9 Fowler's Longhorned Beauty  
From a painting c. 1790 in the Agricultural Economics Research Institute, Oxford

had a dairy of cows which he had selected and bred for uniformity of shape and colour and for the richness of their milk. He had a follower in a Warwickshire farmer, Webster of Canley, who, starting with some Drakelow cows, crossed them with bulls from Cumberland and Westmoreland, counties which seem to have been as famous in those days for the quality of their cattle as they are today. Webster worked to preserve the Drakelow type, and when the greatest of all the early livestock improvers, Robert Bakewell, turned his attention to the Longhorn, it was with a purchase of Canley heifers that he laid the foundations of his herd.

Bakewell was born on his father's farm, Dishley Grange, by Loughborough, in Leicestershire, in 1725. His whole life was spent at Dishley, but he travelled widely to learn what he might from other people's doings. As a farmer he was characterized by enterprise, ingenuity and, above all, by an inquiring mind. Living, as he did, some hundred years before men of science had produced much which the practical farmer could apply, and even longer before the State had organized services of every kind to assist him in grading up his performance, Bakewell experimented by empirical methods and at his own expense, both in the methods of livestock and crop production, so as to raise the quality and the quantity of his output. His farm was an example of the best practice of husbandry then known ; it was well equipped, and laid out in every way for convenience of working. He was a great opportunist, and would even tumble turnips straight out of the field which grew them into a stream which he had canalized to run past the cattle sheds at the homestead, where they arrived at no cost for transport and ready washed. It was his work as an improver of the old English heavy horse, the Long-horned breed of cattle and of the local Leicestershire sheep, however, which made him the first amongst his contemporaries, and it is by this that his reputation lives. There were no breed societies, with their periodical sales, in his day, no agricultural shows at which breeders could display their stock, and so he made his farm his showground ; it became the Mecca of

agriculturists, high and low, where foreign princes and royal dukes rubbed shoulders in the Dishley kitchen with British landlords and farmers of every class and locality. So profuse was Bakewell's hospitality that even the great profits which he made were strained beyond bearing. He was bankrupt in 1776, and died in straitened circumstances.

Bakewell kept his own secrets. He left no account of the principles which guided him in his work. He parted with few of his best animals, his practice being to let sires, both bulls and rams, for the season only. His best-known Longhorn bull, *Twopenny*, was used by most of the larger breeders of the day ; and *Twopounder*, the most famous of all his improved Leicester rams, was once let for 800 guineas for the season. In 1770 he had an aggregate of 3,000 guineas from his ram lettings. Notwithstanding his precautions to keep his methods secret, the means by which he secured such rapid improvement in the quality of the stock with which he started are clear enough. Improvers of herds and flocks had looked to out-crosses to give the characteristics which they wanted. Bakewell, however, worked on the idea that only by inbreeding, mating the best specimens of the breed, even if of the same family, could the desirable points and characteristics be intensified and perpetuated. Only in this way could it have been possible for him to effect the remarkable improvements which he made within the short space of half his own lifetime. The practice was not without its drawbacks, of course ; it was objected, for example, that he sacrificed some of the milking qualities of his Longhorns in improving their capacity to fatten.

A contemporary of Bakewell's, Robert Fowler of Little Rollright in Oxfordshire, beginning where Bakewell left off, had an almost greater success with his Longhorn herd. His bull, *Shakespeare*, calved in 1778, was perhaps the most famous of all the old Longhorn cattle. His breeding is an example of the methods which Bakewell had initiated and which Fowler followed so closely, for *Shakespeare*'s dam was *Twopenny*'s daughter, while his sire was a bull of Bakewell's named *D*, who was a grandson of *Twopenny* on both sides. At Fowler's death, in

1791, the Rollright herd was dispersed for an average of £80 per head, including bulls, cows and calves. Three of the bulls made over 200 guineas, and one of the cows, *Brindled Beauty*, who was by *Shakespeare* out of *Shakespeare's* dam, made 250 guineas.

Bakewell's work on the Leicester sheep, though sensational in the quick results which he got, was perhaps of greatest value through its influence on other breeds, several of which owe the foundations of their improvement to the introduction of some of his new Leicester blood. Leicester sheep have declined in popularity in this country with the decline of arable farming and sheep-folding, and with the consumer's preference for smaller and leaner joints of mutton. The breed is still popular in Australia. The Longhorns, however, have passed almost out of existence, for even in his own day, cattle breeders in the North of England were beginning to improve the native Teeswater cattle and to lay the foundation of the Shorthorn, the breed which has spread all over Britain, and is to be found in almost every country of the world.

The Culleys, Matthew and George, contemporaries of Bakewell, were amongst the earliest in the field, but they adhered to the practice of out-crosses, and it was not until Charles Colling of Ketton, by Darlington, began his work upon the breed that a real advance was made. He had been a pupil at Dishley, where he had observed Bakewell's principles of inbreeding, but it was an accidental experiment, enabling him to compare the results of inbreeding and outcrosses, that convinced Colling of the value of the former for effecting speedy improvement. Thereafter, his Shorthorns were as closely inbred as ever were Bakewell's or Fowler's Longhorns. One of his foundation sires was the bull *Hubback*, which he had seen in a neighbour's field on his way to church and subsequently bought, to which most of the fashionable Shorthorn pedigrees can be traced.

One of the earliest of Charles Colling's achievements was the famous *Ketton Ox*, an animal said to be without fault. It was kept for exhibition, and for many years it travelled England under the name of *The Durham Ox*, to advertise the

improved breed. It has been said that the Longhorn breed was doomed when the *Durham Ox* set out upon its travels. At the sale of Colling's herd in 1810 his bull *Comet* made 1,000 guineas.

It is impossible to name, and even more impossible to describe, the work of all the men who followed these pioneers, Gresley and Webster, Bakewell and Fowler, the Culleys and the Collings. The end of the eighteenth century and the early decades of the nineteenth were periods of great agricultural activity, and landlords and farmers alike, in many parts of the country, were at work on the improvement of the nation's breeds of cattle and sheep. Many records of the results they got survive in the pictures, and in the engravings which were made from them, of the best examples of the breeder's skill. It is not too much to say that for fifty years or more there was an English agricultural school of painting, to which artists so famous as Stubbs, Sartorius and James Ward contributed, while several of the finest contemporary engravers reproduced their work in mezzotint. It is evidence of the high place which farming occupied in national life, that great landowners and statesmen, the Duke of Bedford, Coke of Norfolk, Lord Althorp and others, were well content to be portrayed as adjuncts to their prize stock and in farmyard scenes.

With the advance of the nineteenth century, the improvement of cattle and sheep made rapid progress as interest widened. The foundation of the Royal Agricultural Society of England in 1839, and the inauguration at Oxford of its annual show in that year gave a great stimulus to the development of the breeder's art by the competition which the show-yard engendered. The "Royal" had been preceded by the "Bath and West," and they were soon to have many imitators, for in time almost every county in England and many smaller districts were maintaining their yearly agricultural shows. Today the value of some showyard points is being questioned, as partaking more of fancy than utility ; but there is no doubt of the great work which these public competitions have done for livestock improvement.



Plate 10 The brothers Robert Colling (1749-1820)  
and Charles Colling (1751-1836)

*By William Ward, R.A., after Thomas Weaver*



Plate 11 The Durham Ox  
By J. Wessell after J. Bonhag, 1802

The pig was the last representative of the staple farm livestock to be taken in hand, which is surprising when its universal importance in the nation's dietary is remembered. Over all rural England, salted pork and bacon was the principal meat of the people until recent times, and over large areas of the Midlands and North Wales, wages, commonly enough, were paid partly in an allowance of pork sufficient to give the family about a pound of bacon a day, right up to the inauguration of the State regulation of wages in 1917.

It was not until the middle of the nineteenth century that the improvement of the pig began. Before that time, there was a variety of local breeds, some red, some white, others black, others black and white, out of which the local livestock improvers have now given us some dozen breeds with fixed characteristics. The earliest improvers were not farmers at all, but a group of Yorkshire weavers, "who took to pig-keeping as a useful hobby, and applied to it all the enthusiasm of the fancier."<sup>1</sup> Of this group, Joseph Tuley, a weaver of Keighley, was the leader, and it is to him that the earliest improvement of the Yorkshire breed is due. This is not to say that spasmodic attempts at improvement had not been made before ; it is known that the Chinese pig, an animal quicker to fatten, had been introduced into England in the eighteenth century, and had much improved the native stock. Later, other experiments were made, as when John Knight, early in the nineteenth century, turned a herd of Westphalian pigs loose on Exmoor. But it was the weaver, Joseph Tuley, who inaugurated the systematic improvement of the native breeds with his improved Yorkshire pig, first exhibited at the Royal Show at Windsor in 1851. After him, Sanders Spencer, in Huntingdonshire, continued the improvement of the Yorkshire Whites, both the Large and the Middle breeds, and it was to him that Danish farmers came for so much of the stock which formed the foundation of their Landrace breed when they were organizing an export market in bacon. Some of our

<sup>1</sup> Scott Watson and Hobbs, *Great Farmers*, p. 180

local breeds have been taken in hand and bred to recognized points only in very recent years, the Lincolnshire Curly Coated, for example, the Gloucester Old Spots and the Wessex Saddleback, although the last-named is said to have been for many years the largest recognized breed in the United States, where it bears the more attractive name of the Hampshire Hog.

### *The Soil Improvers*

One of the early observations of our farming forbears as they emerged from the pastoral stage of agriculture and began to cultivate the soil, was that the yields of their crops fell off as one year's cultivation of the same plot succeeded another. So, in the days when there was land in plenty, it was the practice to move away from worn-out soil and to plunder the fertility of adjacent virgin land. It may be noted in passing that this is a practice which has been repeated in modern times in some of the new countries, without the justification which can be claimed for early man working in complete ignorance of the natural laws governing soil fertility and plant growth. Long years ago, however, farmers had learnt by observation and experience that it was possible to restore the fertility of the cropped soil in various ways, particularly by the return to it of composted vegetable and animal residues and even by mixing lime and marl with certain soils. These practices were common knowledge in Virgil's time, who tells us also that leguminous crops improve fertility. All the English writers on agriculture, from Walter of Henley to Jethro Tull, have ranged over the various methods of soil improvement known in their days, of which, of course, the addition of animal manure was the most important. Lord Ernle quotes the saying current amongst eighteenth-century farmers that there was "nothing like muck," observing that what they overlooked was that they had "nothing but muck." Even this was scarce before the introduction of new crops for winter feeding had increased the stock-carrying capacity of the land—witness the harsh custom on open-field manors,

which required that the tenants' sheep should be folded at night on the lord's demesne.

From time to time the fertilizing value of other substances—bones, shoddy and soot, for example—came to be realized, but it was not until the early years of the nineteenth century that the physical scientists began to investigate the connection between plant growth and the composition of the soil. The earliest of these was the distinguished chemist, Sir Humphrey Davy. Appointed by the old Board of Agriculture, in 1803, at the time when Sir John Sinclair was President<sup>1</sup> and Arthur Young was secretary, as Professor of Agricultural Chemistry to the Board, he thereafter devoted much of his work to this subject, and by his public lectures and his experiments he laid the foundations of the study of agricultural science in this country, even though later investigators were to show that much of his work was conceived in error. Farmers toasted him at public meetings; his fellow scientists elected him President of the Royal Society.

It is to a German, Justus von Liebig, born in 1803, that the credit belongs of seeing plant growth in its proper relation to the physical and biological sciences. Though subsequent workers in the scientific field, inspired by him, were to disprove some of his theories, his work laid the foundation upon which others were to build the fabric of modern agricultural practice.

Liebig has been described as a brilliant laboratory worker, and it was an Englishman, John Bennet Lawes, a young contemporary of his, who initiated the practice of field experimentation, as the complement of laboratory work. Lawes, who was born in 1814, came from the class of English country squires, and after a conventional classical education at Eton and Oxford, he began to study chemistry at University College, London. Succeeding to the family property at Rothamsted in Hertfordshire, he began there the experiments with crops and fertilizers to which is due the whole of the modern practice of manuring for the maintenance and improvement of soil fertility. In association with Joseph Henry Gilbert, who had

<sup>1</sup> See p. 131 *post*

been a fellow student with him in London and who had worked later with Liebig at Giessen, the work was developed during a partnership of fifty-seven years, which ended only with Lawes's death in 1900. It was one of their earliest trials which led to the introduction of superphosphate, following the striking results obtained by applying mineral phosphate, made soluble by treatment with sulphuric acid, to the turnip crop. Lawes patented a process for the manufacture of superphosphate in 1842. Knowledge of "artificials," so-called, and their application to field crops spread quickly from this time. Other mineral phosphates, nitrate of soda from Chile, potash manures from Germany, sulphate of ammonia from the gas works, basic slag from the steel works and finally, synthetic nitrogen compounds from the air, came into general use on the farm.

The supply of concentrated, portable manures, adapted by their varied range to all conditions of the soil, capable of restoring those elements of fertility which each particular crop exhausts, and applicable at different stages of plant life, is the greatest achievement of modern agricultural science.<sup>1</sup>

The growth of healthy vegetation does not depend only on the composition of the soil. Its texture is also of first-class importance, and nothing perhaps is more decisive in this than its moisture-content. Heavy waterlogged soils are kept cold by surface evaporation, and only the coarser forms of herbage will grow vigorously in them. On all soils, therefore, except the lightest and freest-working of them, steps must be taken to ensure the speedy removal of surplus moisture. The need was well known to the earliest tillers of the soil, who took care to arrange that their ploughing followed the natural slope of the land, while they used the action of the mouldboard plough to throw the surface into high-backed ridges, with a water-furrow between each. Thus, the rainfall found its way speedily to the bottom of the field, either down the furrow slices themselves or by the water-furrows. Arrived at the lowest contour,

<sup>1</sup> Lord Ernle, *English Farming Past and Present*, p. 368. See also Watson and Hobbs, *op. cit.* Ch. III

the water was led into a convenient watercourse, or failing that, ditches were cut to receive it which communicated sooner or later with the nearest stream. The duty of keeping these ditches in working order was strictly enforced upon farmers by the Manor Courts. Regarded as drainage, the practice was the best, doubtless, that they could contrive, but it was far from perfect. If the contours were steep, rainwater got away fast enough, too fast in fact sometimes, for the finer soil particles would be carried down with it, and farmers were under the necessity of digging out the soil thus accumulated along the bottom of the fields, and spreading it laboriously on the denuded higher portions. If, on the other hand, the surface of the country were flat, ridging the land might turn the water into the furrows between the ridges only for it to remain there, stagnant, through the winter. In fact, in some of the heavy clays in Warwickshire, lands were thrown up high and narrow, with a wide, uncultivated strip between each on which the water could lie. On the London clay in Essex, again, lands were often laid out of the width of the larger farm machines, the drills, rolls etc., so that the horses might walk in the furrows, leaving the soft, heavy ridges untrodden.

These arrangements sufficed, perchance, for a thousand years and more in most parts of the country. In some, however, there was resort to other expedients, which marked a definite advance on the general practice, and were the forerunners of the system of land drainage still practised. The disadvantages of surface-drainage, which washed the finer particles of soil away and soaked out the fertility, are obvious, and a practice grew up on some of the heavy lands of Essex, Suffolk and Leicestershire by which trenches were cut, up and down the slopes of the fields, about  $2\frac{1}{2}$  feet deep; the bottoms were then filled with stones, or with faggots of thorn, and the top soil replaced. Thus a sufficient space was left as a conduit for the surplus water to the ditches at the bottom of the fields by percolation through the soil, without washing the surface of the land. There were other devices, such as burying ropes of straw or hop bines at the bottom of the trench, which left a natural

underground channel for the drainage water. Such practices, however, were very local, and it was not until 1823 that James Smith of Deanston, in Perthshire, developed the idea of systems of stone-filled trenches, cut in parallel lines down the slopes of fields, at frequent intervals, by which he turned "a rushgrown marsh into a garden," that public attention was attracted. From that time onwards, the principles of under-drainage, as opposed to surface-drainage, promoting the percolation of water through the soil instead of washing off its surface, were quickly developed. Smith got his best results by the association of underdrainage with previous subsoil ploughing, and on his land the combined results were remarkable. He was the first to use an implement which would break up the subsoil without bringing it to the top and thereby reducing the fertility of the top soil.

His successor in the evolution of under-drainage was Josiah Parkes, a Warwickshire man and an engineer by profession. His work was based on the experience gained in draining Chat Moss, in Lancashire. Smith's problem had been the removal of surface water which percolated downward to the subsoil. Parkes found that much of the surface wetness of Chat Moss was due to water rising from below, and he argued that field drains should be laid four or five feet deep to catch this. Thus there were the two schools, the one of shallow and the other of deep drainage, and it was a long time before it was recognized that each was right in its own conditions, and that there was no one system of land drainage universally applicable. In the great majority of cases, however, it is surface water, not bottom water, that has to be removed.

All through the first half of the century the drainer's problem was to find a satisfactory filling for his trenches, so that the water might pass away quickly. Bushes perished, stones were often expensive in the heavy-land districts most requiring drainage. Tiles were in use in many places, a course of flat tiles laid on the bottom of the trenches, surmounted by others in the form of an inverted U. These were efficient and durable, but they, too, were expensive.

It was in 1843 that a gardener, John Reade, invented the first cylindrical clay pipe, and Parkes saw at once that here was the ideal water conduit. Pipes came quickly into universal use, and improvements in pipe-making machinery speedily reduced their cost.

So great was the value of the improvements to husbandry which followed under-drainage, that various Acts of Parliament were passed in the 1840s, some to enable landowners and farmers to borrow money from the Government for drainage works, and others to enable companies to be formed for the purpose of making similar loans. The General Land Drainage and Improvement Company, the Lands Improvement Company and the Land Loan and Enfranchisement Company were the more important of them, and large sums were advanced to landowners for drainage and other works of estate improvement during the great years of agricultural prosperity which followed. Nothing, perhaps, has done so much indirectly for the improvement of farming and the increase of food production as has efficient land drainage. It reduced the cost of cultivation by presenting the ploughman with a dry instead of a waterlogged soil ; it promoted the early sowing of crops and it lengthened also the autumn season ; it increased the efficacy of farmyard and artificial manures, much of which tended to be lost in the waterlogged fields of earlier generations.

#### *The Coming of Machinery*

The principles of construction of farm implements were established, some of them, in prehistoric times, and it is remarkable that centuries of experience have been able to make so little improvement in the tools fundamental to soil cultivation. The "scratch" plough or "ard," drawn by two oxen, which is in use in Italy, Palestine and in many other parts of the world today, is identical in all essentials with that which was used in Roman Britain, with the one also which was found in a peat-bog in Jutland, ascribed to the period about 400 b.c., and with the one depicted in a

Bronze Age rock drawing in Sweden some thousand years earlier. The Romans knew the mouldboard and coulter, and pictures of the English plough in the thirteenth century disclose an implement differing very little from the wooden ploughs with wooden mouldboards which were used here and there in the Eastern Counties until only a few years ago. The same is true of drag-harrows and many smaller tools. The flail of the Old Testament days can be bought in country shops, and may still be seen in use in England when special care in separating corn and straw is needed.

From the seventeenth century onwards, however, men here and there were occupied in attempts to increase the efficiency of farm work and the output of manual labour by the invention of new machines or the improvement of existing implements. Jethro Tull's corn drill was in use at Mount Prosperous in Wiltshire several years before its inventor's death in 1740, and by the end of that century the threshing machine was a practical proposition. From this time onwards progress was more rapid. In 1828 Patrick Bell's reaping machine appeared, an invention which was to be of untold benefit to English farmers, even though its consequences, some fifty years later, were to revolutionize the supply of grain to the British industrial market.<sup>1</sup> The inclosure of the open fields, the reclamation of many grass commons and wastes, all of this had added much to the area available for corn production for the fast-growing population by the time of Queen Victoria's accession. But there was no corresponding increase in the labour force, and farmers were dependent on gangs of Irishmen and casual labour of many kinds for the heavy task of harvesting with scythe or hook.

Bell's reaper was propelled into the corn, from behind, by a horse or a pair of horses. Farmers, as always, were slow to apply the new idea to their labour organization. "A hundred farmers plodded along the Elizabethan road, while a solitary neighbour marched in the track of the twentieth century," and it was not until nearly a generation later that

<sup>1</sup> See p. 72 *post*

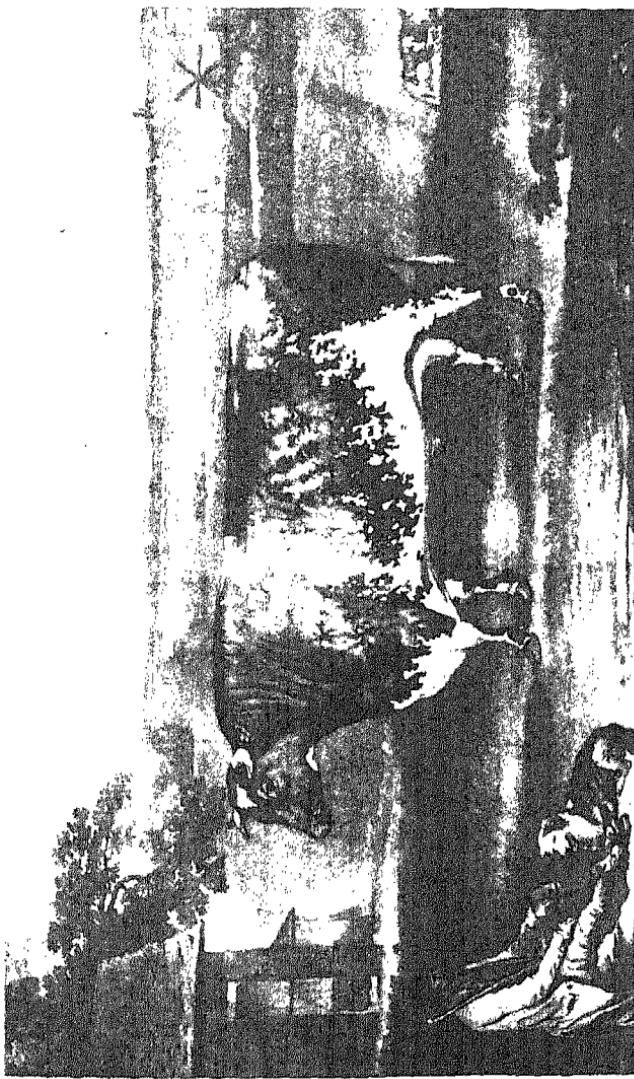


Plate 12   *The Bull Patriot*  
*From a painting by Thomas Weaver, 1839, in the Agricultural Economics Research Institute, Oxford*

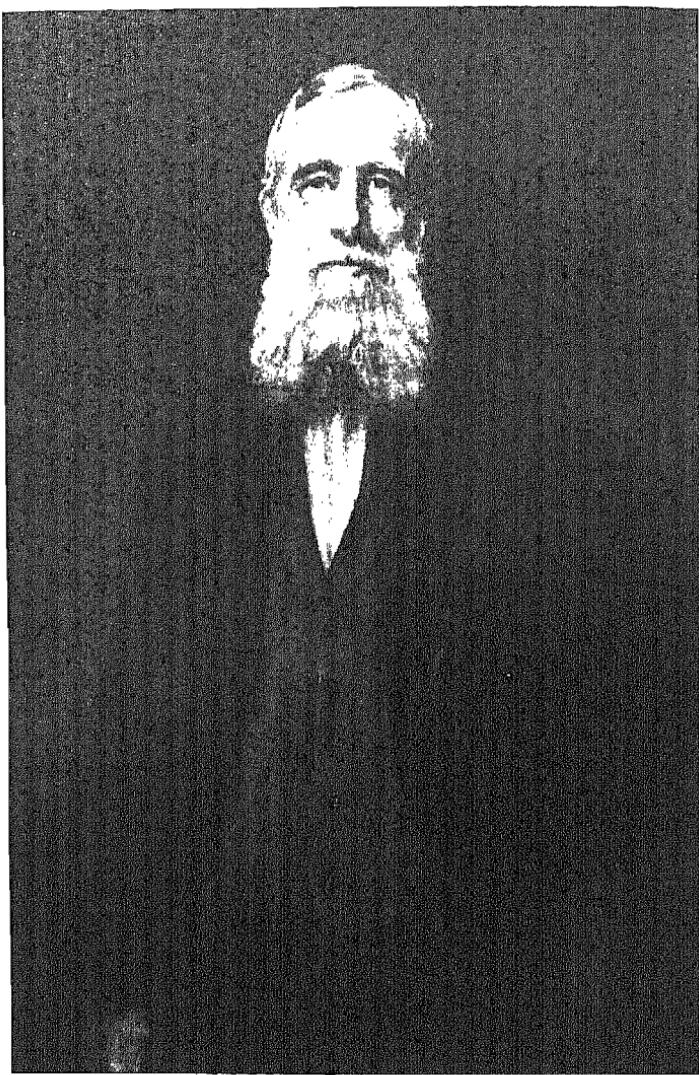


Plate 13 Sir John Bennet Lawes, 1814-1900  
*By J. E. Clutterbuck, after Sir Hubert von Herkomer*

the use of the reaping machine was at all general. This reluctance extended to all the other labour-saving devices, threshing and winnowing machines, chaff and turnip cutters and so forth. Farm workers, of course, were highly suspicious of any innovation which might reduce the demand for labour. Threshing machines, particularly, were unpopular, as likely to deprive the labourer of steady winter work on the barn floor, and riots and incendiary fires accompanied their introduction. In the early thirties the great corn-growing belt from Dorset to the East Riding was seething with discontent, organized by Captain Swing and his disciples as the consequence of low wages and the fear of unemployment. Progress, of course, could not be stayed, and as the century advanced the reaping machine came slowly into general use. Its scope was increased with the invention and spread of the practice of under-drainage, enabling farmers to plough down the high-backed lands of ridge and furrow, that offered serious obstacles to the successful working of the machine.

Patrick Bell gave up agricultural invention to become a Presbyterian minister. He made no money out of his inventions, and it was a contemporary of his in America, Cyrus McCormick, the son of a farmer in Virginia, who was to become the great manufacturer of harvesting machinery. Three years after the appearance of Bell's reaper he also put out a successful machine, and he and his father set about its manufacture. Their reaper was exhibited in London at the Great Exhibition of 1851, where it created an immense sensation, though it was placed second to an improved Bell machine, manufactured by Crosskill, in some trials two years later. The McCormicks' works at Chicago, now the world-famous International Harvester Company, grew rapidly, and they were sending machines into all parts of the globe at the rate of thousands a week before the end of the century.

Travelling machines for saving labour, such as the reaper, were operated first, of course, by horse-power. Stationary machines, like those for threshing and grinding, used horse-, wind- or water-power. Obviously, it could not be long before

steam, which was already revolutionizing manufacture, was harnessed also to agricultural machinery, and it was to the fixed equipment of the barn and farm yard that it was first applied. Fixed engines were installed on the larger farms, to work the shafting to which feed-mills, hay- and chaff-cutters and root-slicers were connected, and, of course, the threshing machines and winnowing machinery. Writing of a Bedfordshire farm of 740 acres in 1850, Caird records that an installation of engine and machinery costing no more than £500 had effected a saving of £200 a year in labour—the wages of about eight men. Threshing and dressing wheat, he said, including labour and every expense, cost 8d per quarter, work which the farmer estimated to cost 2s 8d per quarter by horse-power and 3s 4d to 4s by hand.<sup>1</sup> Steam engines on wheels, the "portable" engines so-called, were soon adopted for use with threshing sets, and they were dragged about from farm to farm by teams of horses. It was a long time before it occurred to manufacturers that steam might be applied as motive power for the engine itself, and well into the present century the portable type was in common use.

On the land, steam-power was obviously too ponderous for the comparatively light machines employed in harvesting and hay-making operations, but quite early in the nineteenth century, men here and there had conceived the idea of soil cultivation by the aid of steam. Many patents were taken out and some work was done, but it is to John Fowler of Leeds that the credit belongs of making a practical success of ploughing by steam. A Wiltshireman by birth, he died before he was forty, but during his short life he had made a revolution in the traditional methods of soil cultivation, and had started a firm for the manufacture of agricultural machinery which was to become famous all over the world. The early ploughing tackle drew the plough back and forth across the field by means of a wire rope wound on a drum on the engine and passed round an anchor on the far side of the field. In 1858 the Royal Agricultural Society awarded

<sup>1</sup> James Caird, *English Agriculture in 1850-51*, p. 449

Fowler a prize of £500 for his steam-ploughing set. Two years later a great improvement was made by the substitution of a second engine on the other side of the field in place of the anchor. Each in turn drew the plough to itself, and then moved along the headland the width of the plough to prepare for the next furrow. Six, or even eight, furrows would be ploughed at a time. The engines were tireless, and the labour teams, being paid piece-work rates and living in huts which travelled round with the sets, worked long hours. Only a few of the largest farmers could afford their own steam-ploughing tackle, the work usually being in the hands of contractors. The demand for their services grew rapidly, for it enabled the heavy-land farmer to bare fallow his land or to break up his stubbles under soil conditions too hard for horses ; on lighter lands a steam-ploughing contract left the farmer's horse teams free for other work. Cultivators, drags and rolls were also used with the engines.

The handicaps to steam cultivation were, first, the layout of fields. The ideal for mechanical cultivation, a large rectangle, was rarely found, and the engine drivers were faced with all the difficulties created by irregular field boundaries and small inclosures. Again, large headlands were left for ploughing by horse labour, and the size and weight of the engines were further problems. It was rare if a few gateposts were not knocked over as the engines progressed from field to field. But steam cultivation was too useful to farmers not to survive all its disabilities, and though the demand was affected by the turnover to grass farming of so much of the heavier arable land during the great agricultural depression at the end of the century, this form of power-farming held its own for some seventy years, when it was rendered obsolete by the internal combustion engine.

The next mechanical improvement in farm work, and one of outstanding importance, was the addition to the reaping machine of a sheaf-binding device. The reapers of Bell and McCormick had undergone various improvements, finishing with the application of the side-delivery principle which laid

the corn in swathes ready for the binders, and it took five men to keep pace with the machine. In America experiments were going on in the seventies with attachments which would bind the corn in sheaves as it left the machine, thus reducing the subsequent labour to stooking, and in 1879 the first successful reaper-and-binder was made. It was fitted with a string knotted, whereas earlier experimental machines attempted to tie the sheaves with wire.

The economic effects of the introduction of the reaper-and-binder were to have serious repercussions on English farming. Great areas of North America, Australia and other parts of the world were potential grain-growing areas, and they lacked only a supply of cheap labour for their full exploitation. The invention, first of the reaper, and then of the reaper-and-binder, offered a solution of this labour problem, and did more perhaps than anything else to bring about the next revolution in British farming.

The period labelled here "The Second Agrarian Revolution" is also that which turned England from an agricultural into an industrial country. All the great changes in agriculture and rural life from 1700 to 1880 might be attributed to the need for food, and more food, by the ever-increasing industrial community. Thus it came about that the common arable fields gave way to farming in severalty; that grass commons were inclosed and allotted in farms; that great areas of woodlands and wastes were cleared and brought under the plough. Again, it was the stimulus of the market and the opportunities for profit that actuated the livestock improvers in their efforts towards better supplies of meat, wool and other animal products. It was the farmers' desire to have more and better crops, both for sale and for livestock maintenance, that encouraged both the engineers who invented the subsoil plough and evolved the practice of under-drainage, and the chemists who studied plant growth and the means to stimulate it. Again, it was the need for greater efficiency in the use of labour that began the application of

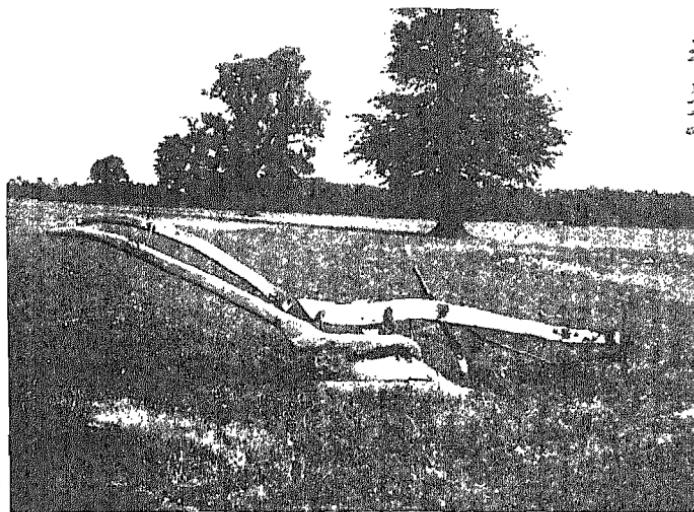


Plate 14*a* Wooden Plough from Coton, Cambs

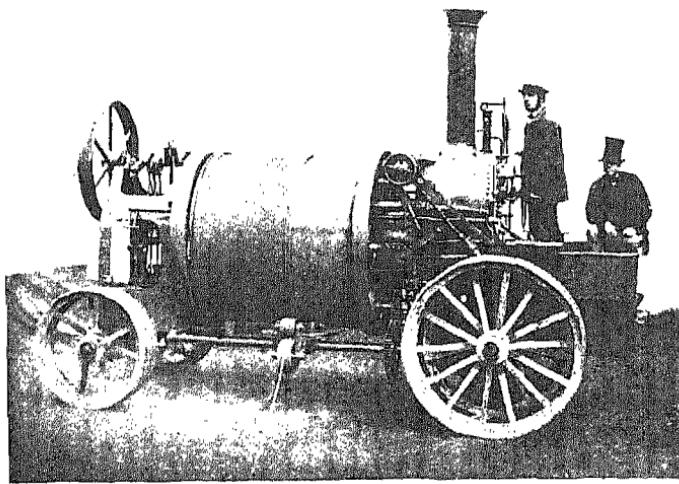
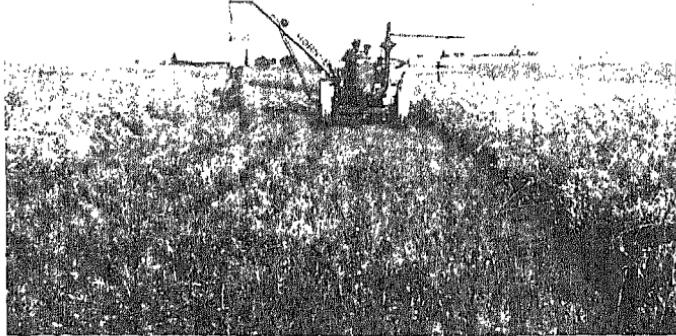
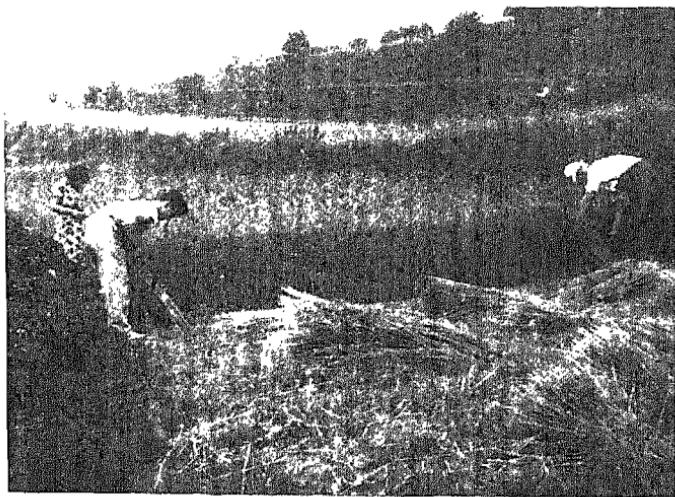


Plate 14*b* Mr Bomford's early Steam Tackle



Harvesting in Wiltshire, 1938



Harvesting in Wiltshire, 1938—or 1939?

Plate 15

mechanical aids to so much of the manual work of the farm.

England, in the main, had still to feed her rapidly growing population from her own soil. All through the Napoleonic wars, the economic isolation of the country was almost complete, and although the generation which followed Waterloo experienced a depression, not even the repeal of the Corn Laws had any effect on the sustained and growing need for home-grown food. Thus it was that the last thirty years of the period under review in this chapter witnessed the culmination of more than a century of a sustained effort towards the betterment of land use in this country. Never at any other time in its history has the land been better equipped by the landowner, better cultivated by the farmer, nor has food production from it been more intensive. Landlords and farmers collaborated in the means to good farming, secure from effective competition from overseas and thus assured of good prices for everything which the land could produce. Only for the farm worker, unorganized, inarticulate and exploited, was the name which has been given to this period, "The Golden Age of British Farming," a bitter misnomer.

## CHAPTER III

### FARMING IN COMPETITION

#### THE IMPACT OF THE NEW WORLDS

FROM earliest times onward until the end of the Golden Age, the history of agriculture in England is disclosed as a record of technical progress. The years that followed, while bearing ample evidence to the fortitude of farmers, were a period in which all the standards of good farming and estate management perforce were lowered, and some of them have never been regained.

During the thirty years which followed the repeal of the Corn Laws, a great variety of circumstances had combined to produce a sellers' market in farm produce, notwithstanding the lowering of trade barriers. The steady growth of the industrial population and the slow increase in imports of agricultural produce maintained the demand for home supplies. There was no serious competition, as yet, from abroad. Continental countries were busy fighting one another. North America was still in the development stage, and the railways and ships which soon were to transport corn, meat and dairy produce to Britain in ever-increasing quantities, were only projected or, at best, were still under construction.

Towards the end of the seventies, however, the situation changed. Political and financial difficulties in Europe, an industrial reaction in America which reduced the demand for coal and iron, rising prices for gold—all of these things brought about an economic depression which synchronized, as ill chance would have it, with a series of bad seasons on the land. Three years of bad weather, which culminated in 1879 in a sunless summer and an abnormal rainfall, reduced the yield of corn on many farms by 50 per cent; while, over the country generally, pleuro-pneumonia, foot-and-mouth disease and liver-rot wrought havoc amongst herds and flocks. In the North American prairies, however, harvests had been good, and the

development of transport both by land and sea, combined with the low freights induced by trade depression, had enabled the American farmers to send heavy consignments to Britain. Between 1871 and 1875 the value of the average annual import of wheat and flour was a little less than £31,000,000. In 1879 it was just below £40,000,000, which represented an increase of more than 60 per cent in quantity, allowing for the fall in the price of wheat. In the same period consignments of meat and of meat-and-dairy products rose by more than 40 per cent.

It was the end of England's greatest farming epoch. New reservoirs of food overseas were discharging more and more into the home market, so that bad seasons were no longer compensated by higher prices. Soon, other countries were farming to supply the English industrial classes. Soon, refrigeration was turning a small trade in canned meats into a great export of frozen carcases, and New Zealand, Australia and Argentina joined the United States and Canada in a great assault upon the British market for grain and animal products. The repeal of the Corn Laws nearly forty years before was at last effective.

National opinion was divided upon the consequences. To the great manufacturing interests, cheap food meant low wages, low wages made for low production costs, and these spelled assured markets and high profits. For the landed interest on the other hand—both landowners and farmers—the price-fall was a disaster of the first magnitude. A generation of prosperity had engendered high standards of estate equipment and maintenance in the landowners, and of farming efficiency in their tenants ; while each of them had become accustomed to expansive personal standards of life. On many estates the permanent equipment—houses, homesteads and cottages—had been entirely rebuilt between 1840 and 1880, while large sums had been laid out in land drainage, plantations and in other improvements. The model villages of those days, the new village schools, the restoration of the parish churches, the Victorian rectory and vicarage houses, and often the houses of the squires themselves, enlarged and embellished,

are silent witnesses to the flow of capital out of the land that was being put back into it to provide higher standards of living and more of the amenities of life. The crash which followed was as sudden as it was complete. Only the dairying and grazing districts showed any resistance, and it was estimated that between 1880 and 1884, the annual rental value of agricultural land in England and Wales fell by £5,750,000. According to Sir James Caird, giving evidence in 1886 before the Royal Commission on Depression of Trade, the yearly income of landlords, tenants, and labourers had diminished, since 1876, by £42,800,000.<sup>1</sup>

The depression was felt most severely in the arable farming districts, that is to say in the eastern half of England. It was here that most of the wheat and barley was grown, and it was in this part of the country that the larger farms, dependent on hired rather than on family labour, were to be met. Thus, when the fall in prices began, farmers were faced with the problem of how to pay rents and wages, which had not fallen, out of diminished and still diminishing incomes. Landlords, of course, were forced to make reductions, or at least remissions of rent, but the wages bill could not be cut, and the standard of living of the farmer and his family was not easily reduced. Farmers who carried on along the old lines in the hope of better times were defeated. Either they went bankrupt, or they went out of farming to save themselves from bankruptcy. Others found a way out by abandoning much of their corn growing and letting their ploughlands go down to grass, with the substitution of stock farming or dairying and a great reduction in the labour staff. Between 1871 and 1901, the wheat acreage was halved, and during the same period some

<sup>1</sup> Quoted by Lord Ernle, *op. cit.*, p. 381.

The decline in the income of labourers, unlike that of the other two classes, was due to the fall in the volume of employment as cornlands went out of cultivation, and not to a decline in wage-rates. On the contrary, it may be of interest to note that the rate of agricultural wages tended to rise all through the agricultural depression. See Orwin and Felton, "A Century of Agricultural Wages," *Journal of the Royal Agricultural Society of England*, vol. 92, 1931

3½ million acres went out of arable cultivation. On the other hand, the cattle population, which had been some 3½ million in 1871, had risen to 4¾ million by 1901. In 1871, there were just a million persons employed upon the land : thirty years later, the number had fallen by a quarter. Alike in the estate office and on the land, "go slow" was the order of the day.

The consequences of this policy are still visible. As regards the landlord's share in the agricultural partnership, there was a shut-down, almost complete, upon the steady evolution of permanent equipment and even on maintenance. The contract of tenancy imposes obligations on both parties, and it was and still is customary, in most parts of the country, for the landlord to be responsible, in whole or in a large measure, for repairs to the farming equipment. With dwindling rents and, quite commonly, farms thrown back upon the landlord's hands and unlettable, it was almost inevitable that the first line of retrenchment should be in his expenditure on estate development. All improvements, such as land drainage, the erection of new cottages for farm workers and new buildings for farm livestock, much of it carried out previously with loan capital, were stopped at once, and a survey of any part of the country today would disclose how little has been added to any of these things during the past sixty years. At the same time, even much of the expenditure needed to prevent dilapidation—timely operations such as the painting of woodwork, replacement of detached slates and tiles, renewal of gates and so forth—began to be neglected. It is possible, of course, to postpone such work for a short space in the hope of better times to come when rents would rise once more, but when these hopes deceive it is not long before a general decline sets in, and the lower standard of estate maintenance, which was to have been a temporary expedient, is adopted as the permanent policy.<sup>1</sup>

<sup>1</sup> *The National Farm Survey of England and Wales*, made between the years 1941–43, disclosed that only 54 per cent of the farms were well planned and laid out for farming, that only 58 per cent of the farm houses and 50 per cent of the farm cottages were in good condition, while only 39 per cent of the farm buildings could thus be described. (H.M.S.O. 1946)

So it was in Britain in the thirty years which followed the great collapse of agricultural prices. It was still very largely a country of great estates, which had maintained, each of them, their own staffs of work people—masons, bricklayers, carpenters, joiners, blacksmiths, drainers, woodmen and so forth—and well-equipped shops, saw-mills and yards. As the readiest means of controlling expenditure staffs were now reduced, and on some estates were dismissed altogether; the yards were closed, such work as was done being put out to contract amongst local tradesmen. The tenants adopted the same policy; landlords who were failing to observe their covenants to repair could not complain if their tenants failed to carry out contracts to fence and to lay hedges, to scour watercourses and clean ditches, to cut thistles and dig anthills. Estate management and farming alike settled down in the eighties and nineties at lower levels.

In the new century markets began to steady a little, and by about 1906 wheat prices had risen from the depths of the previous decade, and the major adjustments in farm practice imposed by the changed economic conditions had been made. Let us see what they had been. Over the country as a whole—England and Wales—the land under arable cultivation had fallen from 14,406,000 acres to 11,589,000 acres (19.5 per cent) between the years 1878 and 1906. During the same period the wheat acreage had dropped from 3,143,000 acres to 1,705,000 acres (45.7 per cent), while the area in permanent grass had risen from 12,757,000 acres to 15,804,000 acres (23.8 per cent) and the cattle population from 4,642,000 to 5,808,000 (25.1 per cent). Wheat growing had gone, except in the districts most favourable to it, and with it about a fifth of the arable land, to be replaced by permanent grassland and cattle.

It must not be assumed, however, that the country was uniformly affected. Corn growing and arable land was associated particularly with the eastern and south-eastern half of the country, where the rainfall is low, while grassland and cattle predominated in the wetter, western half. Grassland

and livestock characterized also the mountainous regions of Britain, which are for the most part in this half. It was the counties of the eastern half, therefore, that were affected most acutely by the great agricultural depression both directly and indirectly. Directly, because of the fall in the prices of the commodities, corn and meat, in the production of which they were concerned ; indirectly, because grain growing and arable farming is, relatively, a large-scale business involving considerable capital outlay and dependence on hired labour, whereas cattle raising and grass farming is more a small-scale business in the hands of family farmers. Thus the farmers of the arable districts in the eighties and nineties of last century were faced with steadily declining incomes from the sales of their produce, while their production costs showed no proportionate decline. Everywhere landlords were compelled to reduce rents, or at least to grant abatements, but the wages of the workers upon whom the farmers depended could hardly have dropped from their already low level ; in fact, they tended slightly to rise. As a result, many farmers were put out of business—and landlords experienced the greatest difficulty in re-letting farms thrown on their hands.

Then there began a remarkable migration of farmers from the warmer and wetter counties of the west into the depressed areas of the east. In their home districts, the men of Somerset, Devon and Cornwall, of South Wales, of Lancashire, Westmorland and Cumberland, and of the south-western counties of Scotland were, most of them, grassland-and-livestock farmers. Their holdings were small, and they managed and cultivated them mainly with their own labour and that of their wives and families. They were working farmers, not “collar and tie” farmers, and the organization and practice of agriculture as followed by them tended to protect rents and profits when both were crumbling in other parts of the country under other systems of husbandry. In the early years of the depression they began to realize that farms larger and cheaper than their own were going begging within a few hours’ journey.

Emigration started from the south-west of Scotland, a few

enterprising Scots being tempted by advertisements of vacant farms, to chance their fortunes in Essex. Coming from stock-raising and dairying districts, they continued their own systems of farming. They took arable farms, formerly cropped for corn, laid them down to grass and started dairy herds. London provided a market for new milk, which enabled them to escape from the drudgery of cheese and butter making, and with their habits of hard work and their more economical standards of living, they were well equipped for meeting the new conditions. The reports they sent home encouraged their friends to follow them into Essex, and soon the livestock farmers and dairymen from the other western regions of Britain were moving eastward into the corn-growing districts. A census of Essex alone, which is manifestly incomplete, showed that between the years 1880 and 1930, no fewer than 433 farms had been taken over by these migrants, 170 of them coming from south-west Scotland, 119 from south-west England, and the rest from the various counties of the west and north-west. There were two periods of particular activity in this movement, the one coinciding with the years of the great depression, the other with those of the slump which followed the First World War. The migration was going on, however, without a stop through the whole of the fifty years.<sup>1</sup>

A new agriculture had emerged, by which much of the former corn-growing districts were now predominantly stock farming on permanent grassland, and dairy farming for milk production in particular. In the western half of the country the changes had been less pronounced because grassland and stock farming had always been characteristic. The *tempo* of farming, however, had declined. The changed systems could be followed with less labour, and there was a great decline in the agricultural population, which fell from 1,190,000 in 1881 to 972,000 in 1911, a drop of more than 18 per cent.

Many of the rural craftsmen, too, were put out of business with the falling demand for their products—the hurdle-makers,

<sup>1</sup> See E. Lorrain Smith, *Go East for a Farm: a Study in Rural Migration* (Oxford, 1932), for the full story.

for example, who made the hurdles for folding sheep on the arable land, and the blacksmiths, saddlers, wheelwrights and others, who supplied and repaired the equipment of ploughland farming. Landlords, too, were shutting down. No more model cottages, no new farm equipment, drastic reductions even of expenditure on maintenance. The full force of the policy of free trade in food, to which the nation had committed itself two generations earlier, was being experienced at last. Transport had made all the resources of the world available to British industrial workers, leaving them free to engage in enterprises giving returns on their labour greater than those which reward the producers of food. There had been legislation, following the repeal of the Corn Laws, to free the land-owner from the restrictions of the laws of settlement so that he might play a fuller part in the development of the resources of the land. There had been legislation to free the tenant farmer from the restrictions of his contract of tenancy, when the agricultural depression had destroyed the landowners' incentive to lead ; and there had been legislation to provide access to the land for the farm worker, as an economic ladder which farming does not offer to the wage-worker. A Royal Commission on Agriculture had inquired and reported (1879-82), and a Board of Agriculture, with a president, had been constituted in 1889. These things done, the State was content that British farming should be left to work out its own salvation, in the faith that the food supplies of the people would never fail. British agriculture could develop, or it could decline, without regard to the need of the nation to be fed, being controlled only by its ability to compete with its products upon an open market. Peace and plenty had been the country's watchword, and the impact of the Boer War at the end of the century was insufficient to raise a doubt in the minds of the great majority, that peace and plenty would continue to bless the nation.

## WAR-TIME AND AFTER

So things continued until the outbreak of the First World War in 1914. By this time the nation had become dependent on imports for fully one-half of all its food ; no less than 75 per cent of its bread corn was coming from overseas. With the outbreak of maritime warfare the weakness of such a position was obvious, but the Government was not unduly alarmed. England had command of the seas and little doubt was felt about the transport of the food supply. Within a year, however, the losses of shipping from submarine warfare had become so serious that a departmental committee was appointed to consider how to maintain, and, if possible, to increase, the production of food in England and Wales, on the assumption that the war might be prolonged beyond 1916. The Milner Committee, as it was called after its Chairman, Lord Milner, made certain recommendations, but little was done except by way of exhortation to consumers to economize and by appeals to the farmers' patriotism to produce.

By 1917, however, it was obvious that measures more positive must be taken. A Food Production Department was set up by the President of the Board of Agriculture, and a great organization was built up throughout the country, under County Executive Committees, vested with powers to order the ploughing and cultivation of grass fields and other operations considered necessary for the increase of food production. A Corn Production Act was passed in the same year to give the State powers to order these and other things. The Food Production Department was responsible for the provision and distribution of labour, machinery, implements, fertilizers and feeding-stuffs, and for securing the enforcement of the orders issued by the Committees. By the end of the war nearly three million acres of grassland had been ploughed, the production of wheat had been increased by 58 per cent over the ten-year pre-war average, and of all grain crops by 32 per cent, while potatoes had increased by 59 per cent. Some 100,000 tons of meat had been lost in the process, but

even allowing for this, the net gain in human food was large.

In return for the acceptance by farmers of control and direction, the Corn Production Act guaranteed them against the possibility of serious losses on the wheat and oat crops grown for the harvests of 1917-22. It prohibited also the raising of rents by landlords as a consequence of this guarantee. Having thus safeguarded the farmers, it fixed a *minimum* rate of wages for agricultural workers, representing a considerable advance on current wages, and provided machinery in the form of an Agricultural Wages Board for fixing *minima* for all classes of farm labour from time to time during the continuance of the Act. Labour for the new ploughlands and for the replacement of men who had joined the armed forces had to be found. The labour division of the Food Production Department provided more than 120,000 men mostly for seasonal work, more than half of them borrowed from the Army, while the rest were prisoners of war, schoolboys during the holidays and volunteer workers. The women's division raised a Land Army of 16,000 full-time and some 300,000 part-time women workers, while the cultivation branch of the Department imported more than 4,000 agricultural tractors, which were placed at the disposal of the County Committees for speeding up work in the fields.

There is no doubt that the food situation of the country in the latter half of the war had given the Government some bad moments, and the end of hostilities in November 1918 found it full of good resolves for fostering home production in the future. The Prime Minister, Mr. Lloyd George, at a great meeting of agriculturists at Westminster, promised that farming should never again be left to its fate, and in 1919 a Royal Commission was appointed to make recommendations in this sense. One of these was that the war-time emergency principle of guaranteeing prices for certain farm products should be made permanent, and in the next year the Agriculture Act was passed, the main purpose of which was to secure farmers against losses which they might incur in the production of

wheat and oats for the open market. The war had stimulated production in all the grain-exporting countries of the world, and now that the seas were free once more it was a safe bet that war-time prices would drop. How far the fall might go could not be foretold, and so the Act repealed the provisions of the Corn Production Act, 1917, relating to guarantees, and substituted a piece of complicated machinery for the calculation, year by year, of the costs of production of wheat and oats, and farmers were guaranteed these costs. Thus, while no man would be encouraged to embark upon corn growing in the expectation of making sure profits, neither need anyone be deterred by the fear of incurring losses ; he was to be guaranteed the theoretical average costs of his crops, and only the less efficient amongst farmers would not recoup their expenses.

The Agriculture Act was no sooner on the Statute Book than the collapse of the post-war boom in world prices began. There had not been time for the machinery needed for calculating farmers' costs of production to be set up and put in motion before the very situation arose which the Act had been framed to meet. The fall in prices of wheat and oats was such that it was estimated on good authority that the State would probably have to meet a bill from the farmers for some twenty millions under the guarantee of the Act, and the Government refused to honour its signature. Within a few months of its enactment this part of the Agriculture Act, 1920, was repealed,<sup>1</sup> and, as a corollary to the withdrawal of guaranteed prices for farmers, the Agricultural Wages Board, guaranteeing rates of pay to farm workers, was disbanded by the same Act.<sup>2</sup>

Politically, farming had returned to its pre-war position. After all the stimulus to production of the war years, it was now thrown back upon its own resources, to depend from this time onwards upon its capacity to compete in an unprotected

<sup>1</sup> By the Corn Production (Repeal) Act, 1921

<sup>2</sup> It was re-established, however, under the first Labour administration in 1924.

market. Prices were falling rapidly : wheat, which had been 72s 10d per quarter in the last war year and had risen to 80s 10d in 1920, had fallen to 42s 2d three years later. Soon the position of farmers in the corn-growing districts became serious, and the first Labour administration, which came into office in 1924, resolved upon an interesting step, which was to have far-reaching effects, to help them.

For long years a small group of enthusiasts had been advocating the introduction of sugar beet into British farming economy for the manufacture of beet sugar. They pointed out the great benefits which had accrued to the Continental countries which grew it. Soils benefited from the deep cultivation and heavy manuring, there were valuable by-products in the tops and the extracted pulp for livestock fodder, while the extraction and refining of the sugar provided industrial employment. Experimental cultivation had demonstrated beyond question that the crop was well-suited to the soils and climate of this country.

The project depended, of course, upon the provision of capital for the erection of factories in suitable places, and financiers were shy of the competition which the infant industry would have to face from a great organization spreading through nearly every country in Europe, with a hundred years of experience behind it. There were also vast reserves of cane sugar in the plantations of Britain's own colonies, and in the Dutch plantations of the east. Like other food commodities, sugar prices had soared during the war : they had ranged round 12s to 15s per cwt previously, had risen to 90s, and they were still round about 26s in 1923. The Government now decided to subsidize the production of sugar from home-grown beet, on a descending scale of help which would run off altogether after ten years—in other words, the industry was to be given ten years in which to grow up and find its feet.

The Beet Sugar Subsidy Act, 1925, was passed, and its consequences were almost sensational. Capital was forthcoming immediately for the erection of some half-dozen factories, and the area under cultivation for the crop rose from

a few hundred acres before the passing of the Act to 347,000 acres by 1930. Supported by the sugar subsidy, manufacturers were able to give farmers profitable contracts for beet, and by the end of the ten-year period the crop was well established in the rotation in most of the arable farming districts of the country. It had provided a valuable source of income to farmers during the worst years of the post-war depression.

Farming had experienced nothing so bad since its great setback towards the end of the nineteenth century. Prices had steadied a little after the fall in 1922, but from 1925 onward the markets for all kinds of produce were crumbling. As before, the depression was most severely felt in the eastern half of the country, the regions of larger holdings and arable farming. But whereas in the eighties and nineties of last century the depression in British farming was due to the growth and development of a prosperous agriculture in the New Worlds, British farmers were sharing on this occasion in the approach of an economic crisis which was to convulse the whole world hardly more than ten years after the end of the war.

Perhaps the most important commodity in universal production in this country is milk, and milk prices had fallen just as sharply as those of wheat. The causes were more complicated. Up to the end of the war milk producers all over the country were completely unorganized, whereas their customers, the distributors, were organized in large units for the supply of most of the great centres of population. This put the milk producer in a weak position when bargaining for his yearly or half-yearly milk contract, and it was accentuated when, bit by bit, the larger buyers began to organize the collection of milk from the farms instead of from the railway stations in the consuming centres. Many farmers in the dairying districts had been cut off from the liquid milk market by lack of transport. Calf-rearing and butter- and cheese-making were their outlets, and for these purposes milk was worth a good deal less than the price it commanded in the market for liquid sale. Farmers and their wives were only too glad to abandon

the more laborious and less remunerative alternatives when offered the opportunity of access to the market for new milk by way of the lorries of the distributing firms, which were prepared to call daily at the farm gate. Producers along the main railway lines running into the big consuming centres and those in the adjacent suburban districts, who between them had shared the market, now found the competition increasing, and before long their position was seriously assailed.

At this point the National Farmers' Union intervened. It was a body which had been formed in 1908 to promote the interests of its members, and it initiated discussions with the milk distributors which resulted, in 1922, in the setting up of a Permanent Joint Milk Committee composed of representatives of the organizations of all the interested parties. Its object was to negotiate agreements for the purchase and sale of milk. The work was complicated by two things : first, because milk production exceeded the demand for new milk for consumption in the home, so that two prices had to be fixed, one for that which was to be sold "liquid," and the other for that which was "surplus" to this trade, that is to say, milk for which the only markets were as cheese or butter, or some other form of manufacture. Second, because the Committee had no power to enforce the agreements which they concluded. As time went by, the scheme virtually broke down, buyers paying the agreed prices only when it suited them and using the strength of their bargaining position to enforce lower terms on many milk producers.

But the attempt of the National Farmers' Union to organize the sale of milk cannot be said to have failed. Incidentally, it had done much to draw the members of the Union more closely together, and to extend the influence of their organization. More important, it marks the first attempt by farmers at combination for marketing. Agricultural co-operation, with some exceptions in favour of the purchase of requisites, has never made much progress in this country. Most farmers are conspicuously individualist, and with markets at their back-doors for everything which they produced—if at a price

—they were content to go on selling on a retail scale, their products unbulked and ungraded, in markets controlled by well-organized wholesalers. The idea was growing, however, all through the twenties, that the fault was not so much in the farmers' stars as in themselves, and that the wide spread between prices received by producers and those paid by consumers could be reduced if farmers would get together to reform their methods of marketing.

In 1923 the Minister of Agriculture had set up a departmental committee, under the chairmanship of Lord Linlithgow, to examine and report on the *Distribution and Prices of Agricultural Produce*. This Committee did not find much to criticize in the costs of distribution of agricultural products as practised ; in the great organization of wholesalers, dealers, commission agents and retailers that stood between farmer and consumer, no one member seemed to be making excessive profits. But the Committee did not probe deeply into the value of the services rendered by each, or into questions of redundancy and overlapping. Fresh point was given, however, to the importance of securing efficiency in distribution as the corollary to efficiency in production, and marketing problems now became the main preoccupation both of the Ministry of Agriculture and of farmers' organizations.

As a result of the Linlithgow Committee's Report, a marketing branch was set up in the Ministry of Agriculture, and a survey of marketing methods was undertaken, product by product. The problems could not be dissociated from those of the Dominions and Crown Colonies which looked to Britain for outlets for their agricultural products, and in 1926 an Empire Marketing Board was constituted. Attempts at the grading of produce were made, on lines already adopted by several food-exporting nations, and the "National Mark" was established as a guarantee of quality to be placed on home-grown products conforming to prescribed standards.

Reference to the plight of arable farmers and of milk producers, as agricultural prices continued to crumble with the advance of the world economic crisis towards the end of

the 1920s, has already been made, and not all the investigations of marketing methods at home and abroad could suffice to remedy it. There was strong opinion in some political circles, however, that marketing reform, particularly by the organization of producers' co-operative selling agencies, could do much to secure better returns for farmers, and expression was given to this view by the enactment of the Agricultural Marketing Act, 1931, by the short-lived Labour administration which had come into office in 1929. Experience had shown conclusively that even when a large majority of the producers of any commodity combined in a selling agency, their efforts could be stultified by the small minority who stayed outside. The principle of the Addison Act, so called after the Minister who introduced it, was to empower a two-thirds majority or more of the producers of any agricultural commodity to operate marketing schemes framed for their mutual advantage that would be compulsory upon the reluctant minority. Farmers, however, were disappointed. In their opinion the Act did not go far enough in the direction of producer control, for it left the home market still very much at the mercy of producers from overseas. In fact, only one marketing scheme was initiated under the Addison Act, the scheme which resulted in the formation of the Hops Marketing Board in 1932.

#### PROTECTION

Hop-growing was a protected industry, for heavy duties had been imposed on imported hops. Otherwise, the only protection for British agriculture was that which growers of sugar-beet enjoyed by the operation of the Government subsidy to home-grown sugar. All this was now to be changed, and during the years between the enactment of the Agricultural Marketing Act, 1931, and the outbreak of the Second World War, a policy of total protection for the farming industry was carried through. By contrast, it is of interest to note that for nearly a hundred years the policy of Free Trade in food had been accepted by all political parties. Even when the Tariff Reformers were seeking to convince the country of the need to

protect its major industries against the competition of imported goods, they made exceptions of all food products. The cry of "Dear food!" could still have rallied the country in the year 1906. Conditions had changed, however, by 1931, for food prices in the world market were so low that the suggestion of public assistance for farmers raised no apprehensions.

The new policy was not based on the application of any one principle, such as taxation of imports; on the contrary, each commodity was considered separately, and the form of assistance most appropriate to the circumstances of its production and marketing was provided. In November 1931 the first step had been taken by the enactment of the Horticultural Products (Abnormal Importations) Act. In March of the following year the Import Duties Act imposed a 10 per cent *ad valorem* duty on all imports, but it contained a free list which included most agricultural products and all Empire goods. In 1932 came the Wheat Act, to subsidize wheat growers. Unlike the sugar subsidy, the cost was to be borne by the consumer, instead of by the Treasury, and the subsidy was limited to a specified quantity of home-grown wheat, instead of being unlimited. In July 1933 was passed the second Agricultural Marketing Act. To the Act of 1931, which enabled a majority of producers of a commodity to regulate the marketing of their produce by methods which would be binding on the minority, it added powers to regulate supplies, both of imported and of home-grown products. Thus, by straight tariffs (horticultural products), restriction of imports (bacon), restriction of home production (hops), Treasury subsidies for producers (sugar), consumers' subsidies for producers (wheat), marketing control by producers' boards (milk)—by these means, by combinations of them and in other ways, every product of British agriculture came to be protected by 1938 from the worst effects of the economic blizzard which had swept the world for the previous ten years.

It would have been difficult, no doubt, to adjust this assistance equally to all the commodities involved, and farmers were quick to realize where the greater advantages lay.

Mention has been made already of their prompt reaction to the prices payable for sugar beet under the home-grown sugar subsidy, and when the Act by which it was provided expired in 1935, the Government decided to continue it, notwithstanding that the departmental committee set up to examine the whole position reported unfavourably on it. Thus, the acreage under this crop was well maintained. Milk, too, had been a popular product, owing to the natural protection from overseas competition enjoyed by reason of its perishability, and with producer-control of prices assured when the Milk Marketing Board was set up, production went ahead. But perhaps the most noteworthy consequence of the new policy was its effect on wheat production. Under the Wheat Act, 1932, farmers were guaranteed a price of 10s a cwt. for a maximum production of 27,000,000 cwt., which compared with an average market price of less than 6s and total production of about 23,000,000 cwt. in 1932. Thus stimulated, production rose to about 33,000,000 cwt. in 1933 and to 39,000,000 cwt. by 1938.

Already in 1937 anxiety was growing about the relations of Germany with her neighbours, and the shadow of war was deepening over Europe. An Agriculture Act was passed in that year, to give further financial aid to farmers, and, from the form of it, it may be surmised that State assistance was being directed towards provision for national defence. The maximum quantity of wheat for which deficiency payments at the full rate would be paid was raised by 33 per cent, and barley and oat growers were secured against losses by the guarantee of standard prices for certain acreages. A new feature of policy contained in the Act was the Land Fertility Scheme, by which farmers were to be encouraged to improve their fields by Exchequer contributions of one-half the cost of lime and one-quarter the cost of basic slag applied. When, next year, a subsidy of £2 an acre was offered for all grassland brought under the plough, a step even more important had been taken in the preparation of British agriculture for the heavy demands which shortly were to be made upon it in providing a maximum of home-grown food for the nation at war.

## CHAPTER IV

### THE PARTNERS IN FARMING

OCCUPATION of the land for the practice of farming manifests itself in a variety of ways in the different quarters of the world, as also in Britain. In our country, some farms are cultivated by their owners, called owner-occupiers, while others are owned by individuals or corporations, the landlords, and farmed by other individuals, the tenants. Both the owner-occupier and the tenant may be in a small way of business, relying upon their own labour for the work of the holding, supplemented by that of their families ; or they may be in a larger way of business and dependent upon hired labour for the cultivation of the land and the care of livestock. Thus, the farming business may be carried on by single individuals, or by partnerships of two persons or more, the landlord, the farmer and the labour staff.

Besides these three, there is another interest which affects every farmer's business so much as to make it, in effect, a partner in every farm. This is the interest of the State, or the community. It is 600 years since the Parliament of the day first sought to regulate the use of labour on the land by statute, and since that time the State has intervened in a great range of matters affecting the landlord, the farmer and his men, sometimes in the interests of one or other of these classes, sometimes in the interests of the community as a whole.

The mutual relations and individual responsibilities of these four partners in farming form the subject of this chapter. Almost every country in Europe has experienced revolutionary changes in its land system at one time or another during the last 150 years, while the countries of the New World, starting from scratch, have developed systems of farming adapted to their needs and opportunities. In Britain, the origins of husbandry and land tenure are lost in antiquity, and they have evolved through the ages gradually rather than violently, by

organic growth and adaptation to changing circumstances rather than by revolution.

### THE FARM WORKER

In Britain today the largest number of those who get their living from the land are workers for wages not having any vested interest in the land itself. They outnumber those who occupy land, whether as tenants or as owner-occupiers, by about two to one. This is a complete reversal of the position, say, at the time of the Domesday Survey and for centuries after, when almost every land worker had a direct interest in farming, even if this were no more than the right to turn out a cow on the common or some geese on the village green. It represents, too, an organization for food production different from that of any other country in the world, with the exceptions of those parts in which livestock ranching prevails and where the plantation industries are developed. Farming in Britain has followed the nation's other industries in the evolution of a capitalist system from the one-man or family unit of production. The causes of this development have been indicated above and they need not be repeated.

There are no records earlier than the nineteenth century of the number of farm labourers in the country. In medieval times they were few. For instance, in the fourteenth century Chaucer's Plowman was no hireling, but a man of substance paying tithes of his cattle, and Langland's Piers Plowman was a tenant or a freeholder in the open fields. In Laxton, Nottinghamshire, a typical open-field manor of the Midlands, there were only seven tenants in 1635 who did not occupy any land, and one of these was the miller. The proportion of wage-labourers in the agricultural population was low in the days before the inclosure of open fields, the engrossment of holdings and the growth of capitalist agriculture. With the decline of subsistence farming and the development of farming for profit, the proportion of farm workers to farmers steadily increased.

This new organization of farming may have had an easier passage than that which is recorded of urban industries, but it has not been wholly free from the difficulties which surround the allocation of net returns between capital, management and labour. In rural as in urban industry, the introduction of machinery was not effected without rioting and damage to property. Parliamentary action, through the Factory Acts, to regulate the employment of women and children in the factory and mine, had, later, its agricultural counterpart in the Gangs Act. Most recently, the intervention of the State to fix rates of wages in certain ill-organized industries by means of Trade Boards, was followed by the setting up of an Agricultural Wages Board. Being a traditional industry, universally diffused rather than localized, farming lagged behind inevitably in all these advances, but as national enterprises became more and more industrialized through the nineteenth century, it was impossible to maintain different standards in the largest of them, and today conditions of employment in agriculture vary but little from those in any other of the nation's industries.

The farm worker reached his greatest numbers with the completion of the inclosure of the open fields, commons and wastes, by the middle of the nineteenth century. It will suffice, therefore, to consider his part in the agricultural partnership from the days when he had first become numerically important, that is to say, as the eighteenth century progressed. By this time, hired labour was divided into two classes, sharply defined. There were the farm servants, men and women under yearly contracts of service, who were given board and lodging free in the farm-houses, and lump sums in cash, yearly, for wages. Then there were the day labourers, men living where they might and working from day to day as required by their employers. The male farm servants were concerned for the most part with the livestock of the farm ; they were the carters, waggoners or horsemen, the shepherds and the cowmen. Their work, obviously, went on seven days a week the year round, thus contrasting sharply with that of

the day labourers, who were occupied with field work of all kinds, hedging and ditching, hay-making and harvest, thistle-spudding and turnip-hoeing, dung-spreading, and so on, who could be stood off in slack times and bad weather. The female farm servants, women and girls, were occupied mainly with work in the house or dairy, but milking in the fields and cow-sheds, and tending calves, pigs and poultry, came also within their sphere. Like their male counterparts, their employment was steady and continuous, whereas that of female day labour was mostly seasonal and frequently organized in gangs, under a contractor. If the day labourer enjoyed more independence, through his freedom to sell his labour where he would, it is clear that his economic position was more precarious than that of the farm servant living in. The latter was well-housed and usually well-fed, often as well as his master. His employment was regular and his wages secure. The day labourer, on the other hand, had few or no perquisites, and his nominal weekly wage was subject to deductions for stoppages due to bad weather or lack of work on the farm, at his master's discretion.

With various modifications to suit the times the farm-servant principle of employment persisted, particularly in the Midlands and North of England, well into the twentieth century, and examples of it can still be found. One modification of it concerned married men, who were housed rent free in cottages on the farm, "tied" cottages, in lieu of residence in the farm-house, being paid a part of their wages in kind, called "perquisites," in lieu of board. Thus a shepherd might get, besides his free cottage, so much flour, pork (for bacon), potatoes, or so many rods of potatoes in the field, a long hundred of faggots (for fuel), and milk, the whole being reckoned as equivalent to one-third or more of a full cash wage. On the larger farms, too, and on many of those not so large, it was the practice, as the social status of the farmer advanced with the period of high farming in the 1860s and 70s, to devolve the boarding and lodging of farm servants upon the farm bailiff or foreman. The employment of women on these yearly contracts persisted likewise, but with the decline, first, of

butter-making on the farm, and, more recently, of cheese-making, the female farm servant has now almost disappeared, except as a domestic worker. Women's work on the land is now mainly casual and seasonal.<sup>1</sup>

On the face of it, the practice which required farm workers to live in or to accept a large proportion of their wages in kind, seems indefensible. There were certain advantages, however. There is no doubt that many of them identified themselves more closely with the farm on which they worked and its repute in the neighbourhood, a feeling which was fostered by their preoccupation mainly with the farm animals, in which they often took very great pride. Residence in the farm-house gave better opportunities for training the younger men, both in the work required of them and in standards of behaviour. For the married men, too, the payments in kind insured a minimum supply of food unaffected by fluctuations in market prices. Certainly they seem to have appreciated it, as giving them a sense of security in their standard of life which the day workers lacked, and up to quite recent times it was the aim of most farm workers in the districts where the custom continued, to be engaged as "confined" men.

Today, about the only survivor from a long list of erstwhile perquisites is the "tied" cottage. Cottages on farms are still included as part of the farmer's holding from his landlord, and where they are insufficient to provide housing for the necessary labour staff, other cottages in the nearest village, the property of the landlord, are often assigned to the farmer for occupation by his men. Cottages attached thus to the farm are let to the farm workers upon occupational tenancies, without payment of rent—the workers hold them by virtue of their employment on that farm, and on its termination, from whatever cause, they must quit their homes also. Taken as one in a group of perquisites making up nearly half the total earnings in a contract of service for twelve months, this arrangement worked well enough. Today, when the service can be ended by a

<sup>1</sup> Though even in 1949 the members of the Women's Land Army are full-time farm workers, some of them living in.

week's notice, and when housing for rural workers in all parts of the country is at a premium, feeling is strong that a system which puts it within the power of an employer to render a man homeless is indefensible.

Farm servants used to be engaged on yearly or, at shortest, on half-yearly contracts. All over the country hiring fairs were held in the market towns, either in the spring or in the autumn. The men presented themselves in the streets with badges of their trade, the shepherd with his crook, the horseman with a piece of whipcord, the thatcher with a plait of straw. For the women a convenient hall was requisitioned. Usually there was a holiday week between the old employment and the new. A "fastening penny" a small sum of money, was given by the master to the man he hired, to seal the bargain which both sides had to observe for the full period, unless misconduct by one party or the other could be proved to the satisfaction of the courts. The cash wages were not due, in strictness, until the end of the hiring period.

Both the nature and the amount of the perquisites varied with the locality, as did also the cash wage. In general, perquisites were more numerous and cash wages higher in the midland and northern than in the southern counties all through the nineteenth century, due, of course, to the pull of industrial employment on the labour market. Cash wages showed an upward tendency, but there was no attempt to adjust the total earnings by varying the amounts of the perquisites as market prices changed. In times of rising costs of living, the "confined" man and the farm servant who lived in, thus stood to gain.

Agriculture had always lagged behind urban industries in adapting itself to changing national standards of employment, as a traditional industry was bound to do. But it was the second category of farm workers, the day labourers, who suffered most from their unorganized and unconsidered state, and it is to them that most of the comments on the poor conditions of the rural worker, which are met with in literature and in economic history, refer. They were the men who

performed all kinds of farm work other than tending livestock or working with horses, and in the days when farm machinery was unknown and Britain had to be fed from her own plough-lands, they were numerically a far larger class than they are today, when the dependence of the nation on overseas countries for bread food and feeding-stuffs, coupled with the development of power farming in all branches to save labour, has turned corn land into grass land and farm labourers into farm mechanics. At the beginning of last century their importance in rural society varied a good deal according to localities. From their association so largely with arable farming, it followed that it was in the midlands and eastern half of England that they were found in greatest numbers. In the western half, and in Wales, the characteristic farm was the small holding, mainly grassland, associated with livestock production in one form or another. These parts had never lost the peasant characteristic which had disappeared almost entirely from the rest of the country on the inclosure of the open fields.

This essential difference is still apparent in these districts, notwithstanding the great economic changes that have swept over Britain's farming industry during the past 150 years, and in spite of all the attempts of the State and of private corporations to resuscitate a peasant organization. In the Principality of Wales, for example, 35,000 farmers were recorded in the census for 1931, these being assisted by 31,000 farm workers. In the five eastern counties of Lincolnshire, Norfolk, Suffolk, Cambridgeshire and Huntingdonshire, however, 30,000 farmers employed 107,000 farm workers for the cultivation of their farms, relatively large and predominantly arable. It is not surprising, then, to find that it is the Midlands and eastern half of England which supply most of the story of the struggle of the farm workers for better conditions of life.

The increase in the numbers of the labourer class as inclosure proceeded through the eighteenth century and later, was associated with great hardship and poverty amongst

them. This, of course, was by no means peculiar to agricultural workers, but they suffered particularly by all that they had lost through the inclosure of the common fields. While the occupation of a few strips of arable land, or the right to graze a few animals, or to cut fuel on the wastes did not preclude the necessity for working for wages, these things added to the labourer's standard of living much which a full-time cash wage could not give him.

Contemporary writers have much to say about that which the loss of these "auxiliary wages" meant in the domestic economy of the farm worker.<sup>1</sup> The cow, the pig and the poultry assured him of milk, bacon and eggs ; gleaning in the open fields gave bread corn and pig food ; furze- and turf-cutting rights on commons and wastes gave fuel. But the landless labourer had to go without this varied assortment of food and requisites, or pay cash for it, and his wages were not enough to meet the rising prices. Social conditions were described by two writers at the end of the eighteenth century, the Rev. David Davies in *The Case of Labourers in Husbandry* (1795) and Sir F. M. Eden in *The State of the Poor* (1797), and both were emphatic upon the dangers of the state into which rural society was drifting. Arthur Young, himself an unrepentant advocate of inclosure and of its benefits to the cottagers, changed his mind on the latter point, following the accidental discovery that at a time when the growth of the Poor Rate was general, those parishes in which the labourers still retained some property, were exceptions. Further investigation led him to the opinion that "by nineteen out of twenty Inclosure Bills, the poor are injured, and some grossly injured . . . the poor in these parishes may say, and with truth, 'Parliament may be tender of property : all I know is that I had a cow and an Act of Parliament has taken it from me.' "

The end of the eighteenth century was characterized by high prices and low wages. Not only were prices high, but their tendency was upwards, while wages, besides being low, were static. It had been a duty of the justices in Quarter

<sup>1</sup> See J. L. and Barbara Hammond, *The Village Labourer*, Ch. VI

Sessions to fix the rate of wages, but this was now a dead letter. Such was the misery of the agricultural working classes that the public conscience was roused, and Berkshire justices, meeting at Speenhamland in 1795, worked out a wages scale based upon the price of bread and the size of the family. Farmers were requested to observe the standard thus set, but if they should fail to reach it an allowance might be paid to the men from the Poor Rate to make up the difference. The Speenhamland Act, as it came to be called, was adopted in many parts of the country. Well intentioned, its effects were demoralizing. All classes of agricultural labour, the old and infirm unable to work, the hale and hearty out of work and those actually in work came upon the parish. Men married and raised families, knowing that they would, at least, be provided for by the "bread and children" scale.

Until the defeat of Napoleon in 1815 the main cause of the workers' distress was the high cost of living. Prices fell catastrophically after this date, and in the corn-growing districts particularly the agricultural depression was severe. Farms were given up by their tenants, and in marginal areas many thousands of acres of land, much of it only recently reclaimed under the stimulus of war-time needs, went out of cultivation. Unemployment was general, and farmers based the rate of wages upon that which was necessary to maintain the unmarried man, knowing full well that the Poor Law allowance, based on the size of the family, relieved him of further responsibility.

Notwithstanding the Poor Law allowances and the fall in prices, work on the land became scarcer still, and to the volume of unemployment thus caused was added that which the workers attributed to the introduction of machinery. Gangs of farm workers destroyed the threshing machines which deprived them of winter work with the flail ; stacks, ricks and even farm-houses were burnt, and unrest and violence were general over a large part of the country during the 1830s. Violence was their only weapon, for at that time the labourer had not got the vote, and combinations of workers

for joint action to improve their condition were illegal. Reprisals taken for acts of disorder and violence were severe—transportation and even hanging. Things were brought to a head in 1834, when six Dorset farm workers were sentenced to transportation, under an obsolete statute, for forming a "secret" society. This last act roused public opinion, and the Tolpuddle Martyrs, so called, received free pardons after serving three years of their sentences. The new Poor Law Amendment Act, passed in 1834, did much to remove the worst abuses of the former administration of public assistance.

Farming conditions began to improve with the passing of the 1840s. With the inclosure of the remaining commons and wastes, more land was brought into cultivation, and though wages remained low the tendency was upward rather than downward. A temporary setback to farming followed the repeal of the Corn Laws in 1846, due rather to the fears and apprehensions of farmers than to any more substantial cause; labour staffs were reduced wherever possible, and the use of labour-saving machinery was stimulated. Moreover, the gang system, which had become general throughout the Eastern Counties since the 1830s, still continued. It consisted in the supply of female and child labour, organized in gangs under an overseer, that went from farm to farm for the performance of much of the work on the arable land—weeding, stone picking, manure spreading, potato planting and picking and all the operations connected with the important turnip crop. Apart from its undesirable social consequences, the gang system had the effect of depressing regular wages. It was profitable to the employer, however, for the landlord was at no expense for housing the workers and the farmer got cheap labour when he wanted it. It was not until the passing of the Gangs Act in 1867 that the system was brought under control, and a series of Education Acts passed between 1870 and 1876, the last of which established the principle of compulsory education, made the conditions under which children might be employed much more stringent.

*The National Agricultural Labourers' Union*

Other conditions of work on the land remained unsatisfactory. Housing, for the most part, was deplorably bad, though here and there a landowner would carry out a model housing scheme, effecting sometimes a complete clearance of the old dwellings. Hours of work were long and holidays practically unknown. Wages lagged far behind industrial rates. For some years the Trade Union movement had been gaining strength amongst other workers, and in 1872 a group of farm labourers in Warwickshire formed a union of their own. It began as a club of eleven members, and they invited another farm labourer, Joseph Arch, of Barford, to become their leader. Arch was a skilled farm hand, a champion hedger ; he was also a local preacher with a considerable gift of oratory, and he started, out of hand, to organize the workers. On the 13th February 1872 he gathered no fewer than a thousand of them to an open-air meeting, which he addressed from under a great chestnut tree, at Wellesbourne, and within a fortnight the Union had been launched. Notices were served forthwith upon employers asking for a wage of 16s a week and the limitation of working hours from 6 a.m. to 5 p.m. ; when the farmers ignored the notices the Union called a strike. Its success animated workers in other parts of Warwickshire to form local unions, and by Good Friday, 29th March, six weeks after the first mass meeting, it was possible to found a county organization consisting of 64 branches with some 5,000 members. The movement spread rapidly. Two months after the formation of the Warwickshire Union a National Congress of Agricultural Labourers was held at Leamington, consisting of delegates from Unions in most parts of the country, at which the National Agricultural Labourers' Union was founded.

Much support for the new organization was immediately forthcoming from outside sympathizers. The *Daily News* appointed Mr. Archibald Forbes, the famous war correspondent, to write a series of articles for the paper, in which attention was focused on the poor conditions of the farm

worker. Well-known politicians and public men associated themselves with the movement. Landowners, for the most part, were neutral ; a few were publicly sympathetic, while others were actively opposed. Farmers, of course, were everywhere hostile. Broadly, the National Union had for its policy the raising of wages, the elimination of the abuse of payments in kind, the shortening of the hours of labour and the limitation of women's and children's labour. The Union worked hard in a variety of ways to secure these ends. Thus it organized the migration of labour from areas of rural unemployment into industries in which labour was in demand ; it encouraged emigration to the countries of the New World in which agricultural workers were badly wanted for pioneer work. It promoted the provision of allotments for rural workers, at fair rents, as a means to supplement their subsistence. It was also a benefit society on a large scale, superseding many of the old village clubs with their too frequently unsound financial organizations.

For two years the Unions met with considerable success, and then in February 1874 a group of farmers in Suffolk, faced with a demand for a rise in wages of 1s a week and a further limitation of working-time to 54 hours a week, resolved on a lock-out. Inspired by this show of resistance, farmers throughout the Eastern Counties set to work to break the Union by locking out its members. By the end of March 2,000 farm workers had been stood off ; by the middle of April the number was 7,000, and a month later it was estimated that 10,000 men were idle. Public opinion was sympathetic to them, and unions of industrial workers came to their support, but by the end of July the men had to admit themselves defeated. Lack of funds was partly responsible, but perhaps the more important cause was the great reservoir of casual labour upon which the employers could draw. This included all the unskilled workers of the towns, who drifted in and out of employment, the Irish migratory labour which came regularly for haymaking and harvest, and the extended use of women and children. Nor was there sufficient soli-

darity within the workers' movement itself to make it an effective fighting force. Several unions had refused to join the National Agricultural Labourers' Union, which some of them regarded as too political and belligerent. These bodies had formed a separate organization, the Federal Union of Agricultural and General Labourers, while for a few years in the seventies the Lincoln Amalgamated Labour League had a considerable membership in Lincolnshire, Norfolk and Suffolk. Following the lock-out, membership of the National Union fell rapidly. In April 1874 it had been 86,000, distributed amongst 1,480 branches. A year later it had dropped to 58,000, and 112 branches had been closed.

By 1875 farmers were facing a great agricultural depression, which was to have far-reaching effects on agricultural employment. In all the arable-farming districts, land was being put down to grass and labour was being retrenched. Old men were stood off, to become charges on the Union funds, and younger men could be engaged with the proviso that they must leave the Union. The only alternative for surplus labour was emigration, and the Union did much to promote this. In evidence before the Royal Commission on Agriculture in 1881, Arch stated that some 700,000 men, women and children had emigrated at the instance of the Unions to the New World, where agriculture was developing so rapidly and openings for labour were unlimited. Other evidence bore witness, however, to the improvement of the labourer's position at home as a result of Union organization. But the Union never recovered from the setback of the lock-out and the prolonged agricultural depression. Although in 1877 it could still number 55,000 members, twelve years later membership had dwindled to little over 4,000.

The National Union was concerned not only with wages. It had a comprehensive policy of social and political reform, and perhaps its greatest triumph was the granting of the parliamentary franchise to agricultural workers by Mr. Gladstone's administration in 1884. Arch himself entered Parliament in the following year as member for North-West



Joseph Arch

Plate 16 Joseph Arch, 1826-1919. Organizer of the National Agricultural Labourers' Union



Norfolk, the constituency which he continued to represent, with two breaks, until 1900. He died in 1919 at the age of ninety-two. A born leader of men and a natural orator, it may be doubted whether his great achievement would have been possible but for two circumstances. As a champion hedger, he could always be sure of employment relatively well paid ; his cottage at Barford was his own, which made him independent of any landlord or farmer. Writing in 1912 about the changes in the condition of the farm worker, Lord Ernle has said :

Cynics may say that it was the parliamentary vote which gave the labourer his first real step upwards. It made him the most important of the three classes which constitute the agricultural interest, and from that moment politicians have tumbled over one another in their eagerness to secure his support. Be this as it may, there can be no doubt of his substantial progress since 1884. Most men of the class are still poorly paid ; many are precariously employed and poorly housed ; among all, poverty is chronic, and, though destitution is certainly rare, the dread of it is seldom absent. But, speaking generally, labourers in 1912 are better paid, more regularly employed, better housed, better fed, better clothed. They are better educated and more sober. Their hours of labour are shorter. They are secure of a pension for themselves and their wives in their old age. They can, if they choose, make their influence felt in the government of their parish, the administration of their county, the direction of the affairs of the nation and of the empire. Their wives and children are no longer driven by necessity to labour in the fields. What more can labourers want ? may be impatiently asked by some. Others, conscious that all is not yet well, may ask with anxiety—what more can be done.<sup>1</sup>

#### *The Agricultural Wages Board*

Much remained to be done. Notwithstanding the general advance, the marked disparity in wage rates between different parts of the country still remained, and everywhere, of course, the longer hours and lower levels of reward by contrast with standards in industrial employment. In 1914

<sup>1</sup> Lord Ernle, *English Farming Past and Present*, p. 413, 5th edition, ed. A. D. Hall, 1936  
(072)

hours of labour over most parts of England were from 6 a.m. to 6 p.m. for the summer half of the year, and from daylight till dark for the rest ; there were big districts in which there was no competition for labour, where wages were no more than 2s a day. It was not until after the outbreak of the First World War that a movement to change the economic status of the agricultural worker began—a movement which has carried him along, with one or two checks, until his position today is as good, so far as purchasing power is concerned, as that of any except the more highly skilled trades. In 1916 after two years of total war, the problem of feeding the nation in the face of the submarine menace was such that special measures had to be taken to stimulate home production. Under the Corn Production Act, 1917, farmers were to be guaranteed good prices for wheat and oats, and the corollary was a guarantee of fair wages for their workers. So the Act set up an Agricultural Wages Board, upon which was to devolve the duty of fixing minimum wages and hours of labour for all classes of farm workers, male and female, young and old. The Board consisted of representatives of employers and workers in equal numbers, with an independent chairman supported by a small number of independent persons. In every county of England and Wales similar organizations—the County Agricultural Wages Committees—were set up. Their duty was to make recommendations to the Agricultural Wages Board on wages and conditions applicable to their areas. The Board's duty was to receive these recommendations, to decide the rates of wages to be paid by employers in each district and for every class of labour, and to publish their decisions, which were binding on everyone concerned and enforceable in the Courts.

For the first time in the history of agriculture, wages were now regulated not by supply and demand, not by understandings amongst employers, not by vague ideas about what the industry would bear, but by that which an independent tribunal considered necessary, after due consideration of the arguments of the interested parties, to give the worker a proper

standard of life. The wage was to be a weekly one, so that the hardship of lost time from bad weather and other causes was mitigated ; overtime was to be paid for employment beyond the hours of a fixed working week ; special rates were ordered for Sunday work, and there was to be a weekly half-holiday. It is a commonplace that there is always a time lag between wages and prices, and the war years were no exception. But for five years this new organization for wage regulation held the scales between employers and employed, without encountering serious difficulties in any part of the country.

There is no doubt that there had been a strong case for setting up in agriculture a Trade Board, following the analogy of these statutory bodies for regulating wages and conditions of employment already functioning in those other industries in which the workers were not organized for collective bargaining. In 1917 circumstances had linked the guarantee of adequate wages for workers with the guarantee of adequate prices for farmers, and in 1921, when the price policy broke down and had to be revoked, it followed that the Wages Board had to go also. In its place the Government set up County Conciliation Committees of employers and workers, who, it was hoped, might reach agreed decisions on all matters affecting agricultural employment. It is hardly necessary to say that this hope was not realized, and the Committees never functioned. Wages, which stood at an average figure of about 47s before the repeal of the Corn Production Act, dropped by about 10s within the next twelve months, and a further 10s in the following year. Farmers were dealing directly with their men, and the labour unions were not strong enough to be effective. One of the first acts of the Labour administration which was returned in 1924 was to set up another Wages Board for Agriculture by a special measure. The machinery for wage regulation was the same as before, but whereas the County Committees under the old Act could only recommend and it was for the Board itself to fix rates, under the new Act the Committees were empowered to fix rates, and it was the business of the Board to give effect to them.

The plight of agriculture during the economic depression which swept the world from the later 1920s onward did not give the agricultural workers much to go for in their negotiations with farmers on the new Wages Committees, and it took another world war to start the upward movement in wages once more. By the end of hostilities in 1945 they had reached a minimum of £4, which was raised in the autumn of 1947 to £4 10s. At this figure agricultural wages have approximated once more to a parity with wages in industrial employment. Rural workers, however, are still at disadvantages in other ways. Housing is deficient in quantity, often bad and tied, very commonly, to the worker's job, with all the restrictions on personal liberty that this can entail, while the smallness of many village communities has militated against the provision of public services and amenities of all kinds for every class of rural worker.

Looking back, great changes are apparent in the organization and character of farm labour during the past generation. The distinction between the farm servants and the day labourers has virtually disappeared, both of them now being merged in the weekly wage worker. The introduction of machinery into all departments of farming has turned horsemen and manual workers into mechanics, while the grading-up of wages has stimulated employers to the use of more and more machinery so as to reduce the cost of labour by increasing each individual's output. Much of the great fall in agricultural employment, since its peak in the middle of last century, is due to this mechanization of agricultural processes. But not all of it ; the town draws off many of the younger and more enterprising men who began life in farm work, and the explanation is partly economic and partly social. On the one hand, the small scale of the farmer's operations rules out opportunities of advancement within the industry that every worker hopes to find ; on the other hand, the sparseness and scatter of the rural population in many areas militates, also, against the organization of social and recreational activities which the townsmen takes as a matter of course. Combined with the

unsatisfied demand for more workers in urban industries, these conditions have drained off rural workers to a level below that at which even the reduced requirements of modern farm organization can be stabilized. Today the tendency seems towards the maintenance of a small force of highly skilled workers, both stock-men and machine-men, full-time employed, supplemented by gangs of seasonal labour, drawn, since the war, from the Women's Land Army and from prisoners of war. These sources must inevitably dry up, and the problem then will be how to replace them or how to manage without them.

#### THE FARMER

Farming today is one of the very few vocations in the country from which young men, without capital to invest, are debarred. Although in medieval times there seems to have been hardly anyone who had not an interest of some kind in a piece of land, the equipment required of many of them, both in live and dead stock, was so small that they could hardly rank as capitalists. A share in a plough team, a few sheep, perhaps a cow and a few tools, was the sum total called for from the smaller tenants in the open fields, who supplemented the returns from their few strips and grazing rights by selling their labour. These interests in the land, however small, were often the first rung of the economic ladder by which men climbed to positions of independence and even wealth. The flexibility of the open-field system of land use contributed largely to this. Before inclosure, when farms were made up of scattered strips, it was a simple matter to increase the holdings of young and thrifty tenants by the allocation of extra strips becoming available by death, or by surrender by older tenants. Thus, apart from the freeholders—and not a few of them were small men needing to supplement what they produced on their own land by outside work, or glad enough to rent other land—farmers started in a very small way, extending their operations as good luck and opportunity offered.

Upon inclosure, the bigger freeholders, the landlords, parcelled the estates allotted to them amongst their tenants in farms representing broadly the acreages which these were already occupying, each of them, in the open fields. Each smaller freeholder, or occupying owner as he might be called, came also into possession of a block of land amounting to the combined areas of his scattered strips. The tenant farmers seem to have collaborated with their landlords, the larger freeholders, in turning the consolidated holdings into farms, as the term is understood nowadays, by grouping the furlongs to make fields, fencing them, and deciding which should remain in arable cultivation and which should be laid down to grass. The provision of farm-houses and buildings was the landlords' obligation ; sometimes the existing equipment in the villages sufficed ; sometimes new homesteads had to be built on the new farms ; but one way or another, the larger farmers, whether tenants or freeholders, soon got into their strides under the new conditions.

Things might be more difficult sometimes for the small occupying owners. Where the new holdings were big enough to give full-time employment to the men and their families, they too settled down, and thus was produced the pattern of almost any parish in lowland England as it may be seen today — a group of farms of all shapes and sizes, not conforming to any common plan. The flexibility of farming in the open fields produced holdings of all sizes that could be broken up and reassembled to suit the changing capacities of the various members of the community. The effect of inclosure was to stereotype holdings more or less permanently. There was nothing about the process suggestive, even remotely, of the allocations in "quarter sections" or in any other uniform measure such as has characterized the settlement of some of the new countries and the resettlement of some of the old ones. There was a tendency, for reasons given already,<sup>1</sup> for the smallest freeholders to sell their allotments, which went to enlarge adjacent estates. It was the policy of the larger free-

<sup>1</sup> See p. 38 *ante*

holders, generally, throughout the country, to consolidate their estates by buying up adjacent freeholds which might come into the market, but these retained their identity as farm holdings as a rule, except the smallest of them.

### *The Organization of Farming*

It is this rigidity of the new farming unit, this tyranny of the lay-out, which has determined the type and character of English farming. Here and there a landlord may have amalgamated two or even more small farms ; here and there a successful farmer may have acquired occupation of two or more holdings within reach of each other, and in these ways considerable businesses in food production have been built up, but only here and there. There is no parallel in agriculture for the evolution of that large-scale enterprise which has been the history of all the more important of the nation's industries during the past two hundred years. The *Agricultural Statistics for Great Britain* enumerate some 391,000 agricultural holdings above 5 acres, and more than 333,000, or 87 per cent of them, do not exceed 150 acres.

The consequence of this small-scale organization has been to produce a race of farmers, highly skilled in all the manual arts of their calling, but lacking in opportunity for acquiring knowledge of the biological and physical sciences upon which their work is based, of the working of the mechanical aids to manual labour and, above all, of the modern science of management. The small scale of their operations, and the associated small rewards, have driven them out to work as lads, before they could acquire fundamental scientific knowledge, while it offers little scope for investment in the larger labour-saving machines, and none at all for the employment of management. Thus there has been produced an industry of little capitalists, who stand, industrially, between the peasant populations of the European countries, and the plantation industries of the tropics with their shareholders, their boards of directors and their salaried managers.

This is not to say that farming has never produced the

opposite number of the industrial magnate. In the arable districts large holdings have been developed here and there for the cultivation mainly of corn, sugar beet and potatoes ; similarly, in the hill districts of Wales and elsewhere men may be found who are ranching considerable areas of grassland for the production of store cattle and sheep. Now and again, too, and here and there, someone has emerged who, by the successful exploitation of some set of circumstances or by sheer organizing ability, has succeeded in uniting a large number of farms under one control, and in building up a great agricultural business on lines which have their parallels in any of the nation's major industries. Such a one was William Dennis, a Lincolnshire farm labourer, who, realizing the potentialities of the potato industry, built up an organization of farming and marketing which was floated after his death for several millions. Another was George Baylis, a Berkshire farmer, who found salvation during the Victorian agricultural depression in the lessons of Lawes and Gilbert's experiments at Rothamsted on continuous corn growing with mineral fertilizers. Starting in the sixties on a mixed farm of some 350 acres, he added holding after holding until he was farming 12,000 acres for the production of wheat and barley, without livestock, by a six-year rotation with four white-straw crops, a clover crop and a bare fallow. In the Eastern Counties, more recently, there was Sir Frederick Hiam, farming more intensively on a great scale largely for the production of vegetable crops. But perhaps the most spectacular individual achievement in farming in recent times is that of Samuel W. Farmer, who got together some 25,000 acres of land in Wiltshire, between Devizes and Hungerford. It is typical of the handicaps upon the development of great enterprises in farming that this area was comprised in no fewer than twenty-nine individual farms, owned by twenty-one different landowners.

Born in 1847 at Market Lavington, where his father farmed some 1,500 acres, Samuel Farmer was educated in Aberdeen, and had begun the study of medicine at Marischal College when his own ill-health and his father's early death led him

into farming, at which he was quite inexperienced, at the age of twenty-two. The times were the expiring years of the Golden Age, and Farmer has recorded that his first five years were more prosperous, considering the size of his business, than any he experienced afterwards. Another farm, of 780 acres, was taken in 1874, and a third, of 466 acres, in 1877, so that when the agricultural depression broke upon the arable districts of England, Farmer at the age of thirty was already the tenant of some 2,750 acres. Like his contemporary, George Baylis, nearby in Berkshire, he was a plough farmer, and nearly all his land was in tillage. While Baylis, however, was pre-eminently a *solo* artist, Farmer almost from the start had the help of partners. In 1881, in partnership with his half-brother, W. B. Gauntlett, he added two farms to his enterprise—farms which had been thrown on the hands of their landlord, the Earl of Ailesbury, two years before. Together they amounted to 1,950 acres, and brought the total to 4,700 acres. Three years later, in 1885, Farmer went into partnership with Frank Stratton, member of another notable Wiltshire farming family, in a farm of 930 acres already in the latter's occupation, and together they took over a further 1,100 acres from Lord Normanton.

From this time onwards, all through the agricultural depression, the partners lost no opportunity of increasing their business. In 1887 they took 1,800 acres from Sir Edward Antrobus ; in 1890 a further 1,500 from Lord Normanton ; in 1893, 2,500 acres from the same landowner. In the next year, 1894, the year in which wheat prices touched the lowest in the century, Farmer took, on his own account, 1,650 acres which Mr. Hodges had in hand, and four years later nearly 1,700 acres from the War Office. In 1901 he added three farms aggregating 2,150 acres, the property of different owners but all in the occupation of the same tenant, who could not go on. In the same year, too, the partnership entered upon four farms in different ownerships and occupations, amounting to nearly 4,000 acres—more than 6,000 acres taken over in one year. These are to name only the bigger transactions ;

at intermediate dates smaller farms were also occupied, ranging from 234 acres to 862 acres. These brought the total to nearly 25,000 acres by the year 1906, some 15,000 acres farmed in partnership with Frank Stratton, 5,000 with his half-brother, and the remaining 5,000 acres by himself.

This was the high watermark of the enterprise. The partners may have felt that they had got enough, or it may have been that with the definite improvement in farming fortune which is observable from this date onward, opportunities for picking up cheap farms had gone. Like George Baylis, Samuel Farmer rarely took over a farm which had not been given up by another man in difficulties, though unlike him he never bought land. Thus all his capital was available for management, while he himself was free to go out of farming, in whole or in part, at twelve months' notice. This freedom was exercised after the First World War. Some of his landlords were selling out on the crest of the short-lived land boom, and he and Frank Stratton, partners for five and thirty years, decided to dissolve and take their money out. By 1921 they had given up 15,000 acres, and the area which Farmer continued to occupy until his death, five years later, was reduced to a mere 10,000 acres.

This is not the place in which to describe the farming system on this great estate, except in so far as it might be held responsible for the conspicuous success of these men during a long period of agricultural depression. As to this, most tenants found salvation by the drastic reduction of their arable acreage, with its heavy labour costs, and a reversion to grass-land and livestock. Samuel Farmer and his partners, however, maintained the arable farming, which was the characteristic of the district, to its full extent. So also did George Baylis in Berkshire, but whereas he attributed his success to the entire elimination of livestock, Farmer maintained a herd of more than 1,000 milking cows and their progeny—heifer calves being raised for herd replenishment, and steers for fattening as beef—and a Hampshire Down flock of 5,000 ewes. The dairy herd was a departure from local practice in the eighties

and nineties, in that it took the place of some of the traditional bullock fattening, for Farmer was a pioneer in the organization of the Wiltshire milk trade with London. Cheap and healthy cowhouses were made by paving with blue bricks many of the great corn barns with which the farms were well equipped, and the natural protection which milk enjoyed in the market made it relatively more profitable than meat. He was one of the early users also of steam cultivation, to which his large arable farms with their big fields were particularly well adapted. Doubtless, too, his land was cheap. Landowners faced with the alternative of financing large-scale farming operations on their own accounts preferred to let him the land upon his own terms. But rent is only one item in farming costs and comparatively a small one, and neither cheap land, nor the adoption of mechanical cultivation nor changes in the farming system suffice, even collectively, to explain the development of this great business, which had endowed Samuel Farmer at the end of his life with a fortune of nearly half a million pounds.

But the great farming concerns built up in various parts of the country in the last decades of the nineteenth century and the early years of this one have one characteristic in common. None of them had the capacity to endure when the hand which had created it and guided it to success was withdrawn. William Dennis's organization in Lincolnshire was broken up in failure; George Baylis's composite holding of twenty-three farms in Berkshire was resolved into its components, and the same fate partly befell Frederick Hiam's enterprise in Cambridgeshire and the 10,000 acres which remained in Samuel Farmer's occupation at his death. In the tropics agriculture has been developed upon joint-stock lines, and continuity is secured under boards of directors; in the ranching countries the sheep and cattle industries have evolved in the same way. Home farming, however, has never yet developed as the other great industries of the country have done—from the little family organization to the successful capitalist concern, and so to the joint-stock company

and the combine. It remains today as it was two hundred years ago, a collection of one-man enterprises.

To go back to the times of the creation of the present lay-out, the first effect of the inclosure of the open fields was to free the farmer from the fetters of the common rotation. Not until then could the more progressive of them indulge their bent for experiment and adventure in new crops involving the elaboration of new rotations, and in selection and mating for livestock improvement. Not that the majority of farmers were adventurous, or realized very quickly the opportunities which inclosure presented. The constant struggle with Nature and the frequent setbacks caused by droughts, storms, frosts and pests had bred a strain of caution in those who got their living from the land, which did not predispose them to take risks. So it was long years, for example, before the value of the turnip, except as a garden crop, was admitted. "Let the gentlemen try them," they said. "We have our rents to pay." And although "the gentlemen" showed more inclination to pioneer, this characteristic was by no means universal. Lord Ernle records instances in which landlords themselves were the reactionary force, causing their tenants to covenant with them not to depart from the old rotation of the open fields, when entering upon their newly inclosed farms. Again, the new freedom called for the exercise of thought and the taking of decisions, if the old practice were to be varied in any particular—processes no more popular then, with most people, than they are today. Still, the chance was there, and the pioneers to whom were due the great advances in agricultural practice of the eighteenth century were the children of the inclosure movement.

The end of the eighteenth century brought the completion of this movement in sight. Since then the position of the farmer in the direction of the industry has been one of slow but steady advancement. There is some evidence that the landowner was the predominant partner both in the direction of farming policy and in the improvement of practice in the earlier years, and while it is possible that historians may have

stressed somewhat unduly the work of some of the great landowners of the times, for lack of equivalent records of the achievements of their more enterprising tenants, there is no doubt that farmers, as a whole, were closely held in leading strings and their operations strictly supervised. Food was the nation's greatest need ; land was the best investment ; political power, whether Tory or Whig, still resided with the landed interest.

The agricultural leases current in the early years of last century, and for long after, show how far-reaching was the landlord's control of farming. The rotation of crops to be followed, the prohibition of certain crops which were supposed to "run" the land, the nature and number of the cultivations to be performed, the disposal of the produce grown, the compensation, if any, to be allowed for tenants' improvements and the penalties for infringements of the contract—all these and other matters were specified with meticulous care, and they seem to indicate a state of leadership amongst the general body of landowners in matters of good farming. In theory, if not always in practice, the covenants in farm leases were kept up to date by modifications on changes of tenancy, to give effect to the advances in knowledge of what constituted good practice.

In the days of subsistence farming, bad weather and diseases were the farmer's chief anxieties. With the general conversion of the industry to farming for the market, the common cycle of prosperity and adversity has been as pronounced in agriculture as in any of the nation's activities. Thus it happened that the completion of inclosure was followed by the depression which swept the country after the close of the Napoleonic wars, but by the middle of the century another turn of the wheel had ushered in a generation of prosperity during which farmers and their landlords combined in raising their industry to the highest pitch of technical efficiency, having regard to the knowledge then available and the means at their disposal, to which it has ever attained. The great break in prices which followed in turn in the

eighties and nineties was to have the curious effect of ruining many farmers and destroying half the capital of the rest, while at the same time it started their emancipation from landlord control that has since become complete, and it set their feet upon the ladder of political power up which they have since advanced so far.

The agricultural depression had halved the value of land in a few years, producing a lack of capacity in the landowner which, as was soon obvious, was to throw the responsibility for the conduct of farming and for the welfare of the land more and more upon his tenants. Legislation, by a series of Agricultural Holdings Acts in the eighties and next twenty years, gave all farmers a statutory right to compensation for improvements to their holdings effected by them during their tenancies, a right previously enjoyed only partially and locally, under custom. It freed the tenant from adherence to any prescribed rotation and from the control of any other restrictive covenants, so that he could farm as he liked, subject to the rules of good husbandry. And, subject to the same proviso, it gave him a degree of security in the occupation of his farm such as he had never before enjoyed by making it impossible for his landlord to turn him out of it, except by payment of heavy compensation for the disturbance.

#### *The National Farmers' Union*

By the early years of the present century, the passing of the direction of the partnership in the use and development of the land from the landlord to his tenants was complete, and it was no more than natural that this concession of leadership in technical administration should have its corollary in a desire for greater political influence. Joint organizations of landowners and farmers had been in existence in most parts of the country for a long time. The Bath and West of England Agricultural Society was founded in 1777, to be followed by the Smithfield Club in 1798. Other societies were organized pretty generally throughout the country in the last decade of the eighteenth century and later, though not all of them were

to survive. Some, like the Farmers' Club, founded in 1842, were discussion societies ; others promoted shows, while one or two, the "Bath and West," for example, and the Royal Agricultural Society of England, founded in 1839, financed experimental work and issued journals as well. A national movement was organized in 1865, when the Central Chamber of Agriculture was set up in London, linked to a similar organization in each county.

Most of these bodies had come into being at times of agricultural prosperity, and the movement culminated in these County Chambers of Agriculture, organized at the height of the Golden Age. Though the Chambers continued to function during the great agricultural depression, meeting from time to time to discuss agricultural problems and particularly political ones, it is doubtful whether they exerted much influence. Membership was restricted, in fact, to the county landowners, their agents and their larger tenants. A platform of this kind offered little opportunity for the rank and file of farmers, and it is not surprising that with the turn of the century and the passing of most of the responsibility for farming from the landlord to the tenant, there was a demand for a new organization more representative of the men who were doing the job.

In 1908 a Scottish farmer, Colin Campbell, who had migrated south, got his Lincolnshire neighbours together to form the Lincolnshire Farmers' Union. Voting membership was restricted to tenant farmers and owner-occupiers, while landlords, land agents, merchants, dealers and others were admitted only as subscribing members without voting rights. So successful was this new association that within a year or two it had developed into the National Farmers' Union, with branches in every county and complete district organizations within the counties. Sir Daniel Hall, who, as Secretary of the Ministry of Agriculture in the First World War and later as Chief Scientific Adviser to the Ministry, had been brought closely into contact with the Union, writing of it in 1936, said :

The Union established its claim to be the one body representative of farmers with which the Government could consult. Undoubtedly it acquired this position because its membership was confined to men actually in occupation of land, as well as to the energy and capacity of its early leaders. Throughout the critical discussions of the war and almost equally disturbed post-war period the Union has retained and strengthened its position as the spokesman of the combined farmers of the country. No legislation has been passed or even proposed without previous discussion with the representatives of the Union ; its opinion has always carried great weight even when it has been cast strongly against official policies. Though the Union has been criticised for its opposition to measures which were designed for the ultimate benefit of agriculture, it must be remembered that it is essentially a " trade union," bound to put the current interests of its members in the forefront of its policy. It is concerned to protect the farmers of today, not to develop the agriculture of the future.<sup>1</sup>

Today the National Farmers' Union can claim a membership of 194,000, or more than half the farmers of the country. While the sectional character of its interests may be criticized, the Union has served a wider purpose in these later days, when *laissez faire* is dead and forgotten, and everything which the farmer does is subject to control and direction, in providing a representative body with which the Government can negotiate. The organization of farm workers in their own Trade Union, or in agricultural branches of general unions, meets the same purpose where the workers' interests are at stake, and much that has been accomplished in the evolution of a controlled agriculture would have been difficult, or even impossible, without these associations of masters and men. On Agricultural Wages Committees, on Marketing Boards, on County Agricultural Executive Committees in war and peace, it has been possible to secure representations of employers and employed that have passed without serious challenge.

It must be remembered that any attempt to secure adequate representation of the farming industry presents a serious

<sup>1</sup> Lord Ernle, *English Farming Past and Present*, p. 409, 5th edition, ed. A. D. Hall, 1936



Plate 17 Samuel Farmer, 1847-1926



Plate 18 Colin Campbell. Founder of the National Farmers'  
Union, 1908



Plate 19 Mr Stanier and his Herdsman with a Hereford Heifer  
*From the painting by Thomas Weaver in the Agricultural Economics Research Institute, Oxford*



problem. The Farmers' Union recognizes two main categories of members only, agriculturists and horticulturists. Within these, individual variations are almost infinite. In agriculture there are the great arable specialists of the Eastern Counties, farming large acreages with big labour staffs and multiple machines, and some of them operating their own light railways. Almost alongside of them can be found smallholders working mixed farms of a few score acres with family labour. There are the dairy specialists of the Southern Counties, with herds running into hundreds, equipped with travelling milking bails enabling one man and a boy to serve a unit of sixty cows or more ; and there are the little herds of no more than ten or twenty of the producer-retailers of the West Riding. In horticulture there are the market gardeners and fruit growers of north and mid-Kent and elsewhere, applying science in the management and development of their industry in the highest degree, and there are others, in the Vale of Evesham for example, getting their livings by the intensive cultivation of three or four acres.

Besides these two big groups there are specialist farmers of many kinds—the hill farmers of the Pennines and mid-Wales, raising store cattle and sheep ; the hop growers, with their "closed shop" organization ; the glass-house growers, the bulb growers and flower farmers of Lincolnshire and Cornwall. All these and many more contribute to make the farming of England more varied and more complex probably, both in types and in organizations, than that of any other country in the world.

#### THE LANDLORD

In law all land belongs to the Crown, and those who use it are tenants of one kind or another. It was the thing fundamental to the feudal system, and land was held at all levels in the social scale by services rendered. The larger landlords held direct from the Crown in return for military services, which were often passed on to lesser landlords holding from them. Another class of freeholders held their land by non-

military services of many kinds, the most general being agricultural services, such as cultivations, harvesting, carrying, etc. for a superior lord. These services, military and non-military, were gradually commuted for money payments.

At all times since recorded history begins, there have been large and small landowners. From Norman times up to the present day, there have been those who owned many manors, forming multiple estates, scattered about the country and farmed for the greater part by tenants, and there have been the freeholders of an acre or two in their own occupation. There have been corporate landowners, too, of whom the Church and the religious houses were outstanding examples. Landowners, Church and lay, were themselves farmers, the demesne farms being supervised by stewards or reeves, who indentured upon their lords' tenants for the labour they needed. There is evidence to show that the great landowners, with their retinues, ate their way round their estates, moving from one manor to the next through the year. The smaller landowners were little more than big farmers, and from them the land-owning class ranged downwards to the smallest freeholders, who had to eke out their livings by working, part-time, as manual labourers.

It must not be supposed that there has been much unbroken descent of land from one generation to the next in the same families. From the resettlement of the country after the Norman Conquest, landowning was subject to vicissitudes which are unknown today. To the ordinary hazards of life and the failure of heirs male, there had to be added the sequestration of the property of those who by ill luck or bad judgment had taken the wrong side in one or other of the frequent struggles between the King and the barons. At any time, too, there might be alienation of land from the family to the Church, as a form of spiritual insurance. The greatest upheaval, however, in the ownership of the land of England occurred in the fifteenth and sixteenth centuries, when many private land-owning families were eliminated during the Wars of the Roses, when the religious orders—large corporate landowners—were

dissolved, and when the new social order of the merchant princes was amassing wealth in overseas trade and seeking investment for it in English land. The Civil War of the next century brought about a further shake-out of hereditary landlords, and it was not until the country had begun to settle down again under Queen Anne, and more perhaps in the early years of the House of Hanover, that the stability of the landowning families and their political importance were re-established.

England had finished with sedition, privy conspiracy and rebellion, and her people, gentle and simple, could settle down to develop her resources. Great estates began to be built up by individuals, the wealth required arising from the rewards of service in Church and State in some cases, but more often from the profits of industry and commerce.<sup>1</sup> There was an assured market for the land of any small freeholder wishing to sell, and on many estates it became the ambition of the owners to acquire every acre, not Church or charity land, in the parishes into which their properties extended.

#### *Landlords and Leadership*

Reference has been made already to the pioneering work of many landowners in agricultural improvements, and they were, of course, the leaders in bringing about the inclosure, first by agreement and later by Statute, of all the open fields and most of the commons and wastes of the country, the thing fundamental to agricultural progress. Duties on imported corn, to maintain home prices, protected their rents, and although this still left them vulnerable by bad harvests and cattle plagues, the social position of the landowning class and its control of the legislature were undisputed.

The outstanding example of leadership both in practical farming and in the administration of property during these years was Thomas William Coke of Holkham, in Norfolk. Born in 1752, and succeeding to the family estates at the age of twenty-four, he lived to be ninety, having taken part in

<sup>1</sup> See G. N. Clark, *The Wealth of England from 1496 to 1760* (O.U.P., 1946)

changes in systems of farming and land tenure more far-reaching than any other period of a hundred years could show. Holkham lay in a poor farming district ; contemporary accounts show that rye was the chief grain crop, and they record that the quality of the livestock was low. Two of his farms having been thrown up, Coke decided to farm them himself. The quality of the light, sandy land was improved by marling ; wheat was then substituted for rye, turnip cultivation was established, and Southdown sheep and a herd of Red Devon cattle were introduced. Every encouragement was given to his tenants both by example and precept. They were granted leases which gave them security of tenure and compensation for the improvements which they might make on their farms. They and their friends were got together every summer to see and to discuss the work which Coke was doing. Its fame spread rapidly, and soon people from all over England, *and then from almost every foreign country, and in every walk of life*, were making the yearly pilgrimage to the "Holkham sheep-shearings," when open house was kept for several days, daylight being spent in inspections of crops and stock, while dinner and discussions filled the evenings. Coke rebuilt farm-houses, cottages and farm buildings, and during the first forty years of his administration the rental of the property was raised from £2,000 to £20,000.

Coke lived on through the lean years which followed the end of the Napoleonic wars, always at work on the improvement of farming and the social welfare of those who lived by it. In 1837 he was raised to the peerage as Earl of Leicester, and at his death in 1842 the "yeomen of Norfolk" started a movement to commemorate him, which resulted in the erection of the great monument to his memory at Holkham. It takes the form of an immense column, 125 feet high. At the four corners of its pedestal "the means by which cultivation and production were improved and increased" are represented—a Devon ox, with the inscription, "Breeding in all its branches" ; some Southdown sheep, with the inscription, "Small in size but great in value" ; a plough, with the words,

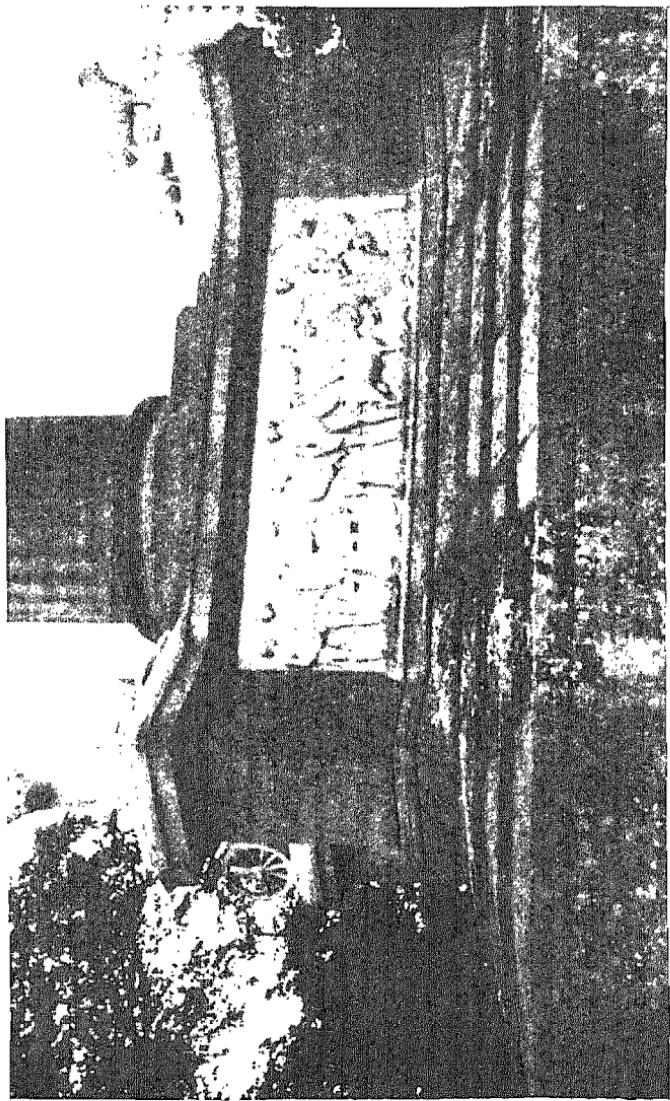


Plate 20 The Holkham Monument



Plate 21 Algernon Turnor, 1845-1921. Co-founder of the Central Landowners' Association

"Live and let live" ; a drill, inscribed "The improvement of agriculture." On three sides of the pedestal are bas-reliefs, the first representing Coke granting a lease to a tenant, the second, a Holkham sheep-shearing and the third, irrigation of the land. The figures in each are portraits of well-known landowners of the day and of Coke's own tenants. On the fourth side is the inscription shown on page 127.

Started by a group of farmers, the memorial made a wide appeal to all classes, and the subscribers ranged from a royal duke to the humblest of Coke's neighbours, from Scottish nobles to Devon squires. The laying of the foundation stone of the column, in 1845, by Lord Colborne, was attended by thousands, and was the occasion of a great demonstration to a great countryman.

It might be said that Coke's death marked the peak point of the English landowning tradition. They had enjoyed great prosperity in the latter years of the eighteenth century and during the first two decades of the nineteenth, which was followed by thirty difficult years after the final overthrow of Napoleon, when the price level of the war years suffered a severe decline, when the political aspirations of the industrial classes could no longer be stifled, and landowners had to accept, first, the great extension of the franchise made by the Reform Act of 1832, and, fourteen years later, the repeal of the Corn Laws.

#### *Free Trade and Taxation*

Although not immediately effective in bringing about a reduction in food prices, the repeal of the Corn Laws foreshadowed the end of the great part which English landlords had played in the development of British agriculture. For another thirty years the growth of the industrial population and other causes served to set off any advantages to the consumer which the new freedom to import food might have given, and agricultural prices remained uniformly good. Landlords and tenants alike were investing their capital with confidence. The State, as will appear presently, was helping

the progressive movement by legislation to assist improving landlords, and great sums were expended on the erection of new farm-houses, new cottages for the workers and new homesteads. On many estates complete rebuilding plans were carried through to bring the equipment of the land into line with the latest ideas, and these had their complement in schémes for the underdrainage of the fields by the system, recently introduced, of tile or pipe drains.

It is natural perhaps that this prosperity, steadily maintained, should have been reflected in the landlords' standards of living. Expenditure on estate improvements was not always confined to the land. Mansions were enlarged, or even rebuilt, and their amenities improved. If the contemporary novelists have given true accounts of social life in those days, it is a fair assumption that no thought of their impending doom had ever crossed the minds of the Victorian squires. It came suddenly. The great depression which set in towards the end of the seventies has been described already.<sup>1</sup> It was no passing phase, for it continued for thirty years, and by the time that the necessary adjustments had been made in the farming system the heart had gone out of landowning as a vocation, never to return. Just as the State had stepped in during the days of prosperity to help the landlord to play his part, so now it recognized his incapacity by a series of enactments during the years between 1875 and 1908, which reduced progressively the landlord's position in the farming partnership, and put the responsibility for the proper use of the land more and more upon the shoulders of his tenants. Today the partnership is almost a dual ownership.

In 1894 landowners had lost another privilege, a loss which, as the years went by, was to bring about almost a revolution in the business of landowning. By the Finance Act of that year land was brought, for the first time, within the scope of the estate duties. Previously, taxation had not been levied on that part of a property passing at death which was represented by land, and this discrimination was now no

<sup>1</sup> See p. 74 sqq

THIS COLUMN IN MEMORY OF  
THOMAS WILLIAM COKE, EARL OF LEICESTER,  
FOR MORE THAN HALF A CENTURY  
THE FAITHFUL REPRESENTATIVE OF THIS COUNTY  
IN THE HOUSE OF COMMONS,  
ERECTED BY SUBSCRIPTION  
ORIGINATING WITH THE YEOMANRY AND SUPPORTED BY THE  
NOBLEMEN AND GENTLEMEN OF ALL PARTIES,  
RECORDS A LIFE DEVOTED TO THE WELFARE OF HIS FRIENDS,  
NEIGHBOURS AND TENANTS,  
OF SUCH A MAN  
CONTEMPORARIES NEEDED NO MEMORIAL : HIS DEEDS  
WERE BEFORE THEM : HIS PRAISES IN THEIR HEARTS ;  
BUT IT IMPORTS POSTERITY TO KNOW THAT HE PRE-EMINENTLY  
COMBINED PUBLIC SERVICES WITH PRIVATE WORTH ;  
AFFORDING AN ILLUSTRIOUS EXAMPLE OF BIRTH AND STATION  
ACTUATED BY DUTY AND INSPIRED BY BENEVOLENCE.  
INTEGRITY AND INDEPENDENCE MARKED HIS POLITICAL CAREER,  
LOVE, HONOUR, AND REGRET  
ATTEND THE FATHER, FRIEND, AND LANDLORD ;  
THE ARTS LAMENT IN HIM A LIBERAL AND FOSTERING PATRON :  
AND AGRICULTURE, TO WHICH  
FROM EARLY MANHOOD TO THE CLOSE OF LIFE HE DEDICATED  
TIME, ENERGY, SCIENCE, AND WEALTH,  
CROWNING HIS CENOTAPH WITH HER EMBLEMS,  
CHIERISHES THE PRECEDENT AND COMMENDS THE PRACTICE  
OF HER GREAT PROMOTER AND BENEFATOR.

longer to be made. It was customary to meet the payment of death duties by sales of part of the property, and this was a simple matter when it was represented mainly by stocks and shares. There was no free market in agricultural land, however, the sale of which was usually a matter of negotiation, and a forced sale might be effected only at a considerable sacrifice. Moreover, there was often reluctance to disturb the integrity of an estate by sales of portions of it, though the objection had a sentimental rather than an economic basis. With the passing of time, however, the dispersal of parts of landed properties passing at death became a normal incident of estate history, and all over the country the consequence has been a steady increase in the numbers of landowners and a reduction in the sizes of their estates.<sup>1</sup>

Following the First World War, this tendency was even more pronounced. The inflated prices of produce had made farming profitable, and for the first time for forty years land was readily marketable at good prices. But the future for it was uncertain, and the owners of many agricultural estates took the opportunity to sell out. As a rule, their tenants were the buyers, and a new class of landowner was created, the owner-occupier. His ranks have been swelled by the steady sales of properties for death duties, and by the stimulus to the larger landowners given by the land boom of the Second World War, to go out of business. Today it is estimated that

<sup>1</sup> It must be noted, however, that a valuable concession to landowners in the amount of the estate duty payable on agricultural property was made by the Finance Act, 1925. Whereas the general rates of duty on property passing at death have been raised at various dates, this Act stabilized them for agricultural values at the rates payable in the year 1919. In that year the rate on the largest estates was 40 per cent; today (1948) it is 75 per cent, and on smaller estates the proportion is approximately the same. On an agricultural property valued, for example, at £1,000,000, the duty payable is £280,000; on an equal estate in stocks and shares it is £650,000. For the purposes of estate duty "agricultural property" is defined by the Finance Act, 1894, as being "agricultural land, pasture and woodland, and also including such cottages, farm buildings, farm houses and mansion houses (together with the lands occupied therewith) as are of a character appropriate to the property."

one-third of the agricultural land of the country is farmed by owner-occupiers.

But the sitting tenant has not been the only buyer. A few corporations, such as the Ecclesiastical Commissioners, the Crown and the Duchies of Cornwall and Lancaster, the older Universities, Colleges and Schools, had long been investors in agricultural land. The County Councils, too, had become considerable landowners under the operation of the Small Holdings Act, 1907. Otherwise land had never made much appeal to the majority of those who controlled large funds. In recent years, however, this attitude has changed. The large concessions accorded to agricultural property in assessment to estate duty has made it attractive to men of wealth, and corporations of many kinds, appreciating the advantages of real estate as a safeguard against inflation, have become buyers on an extensive scale. Indeed, in the steady dispersal of the old private estates and the present trend of investment, there is the suggestion that the landowners of the future will be, on the one hand, the owner-occupiers whose homes are also their businesses, and, on the other, financial institutions of various kinds which are not affected by the incidence of death duties. In passing, it should be noted, too, that under clauses of the Finance Act, 1946,<sup>1</sup> and of the Agriculture Act, 1947,<sup>2</sup> the gradual nationalization of the land becomes something more than a remote possibility.

#### *The Central Landowners' Association*

Like the farmworkers and the farmers, the landowners have their own organization for mutual protection and advantage. The Central Landowners' Association was formed early in the century by the initiative of the late Mr Algernon Turnor, member of a family owning large estates in Lincolnshire. Small and somewhat select in its earliest years, the Association received a great accession to its membership when the break-up

<sup>1</sup> Which authorized the payment of death duties in land.

<sup>2</sup> Which empowered the Minister of Agriculture to expropriate land-owners whose estate administration is inefficient.

of estates during the land boom after the First World War widened the basis of landownership, and many of those who had been tenant farmers found themselves agricultural landlords. Unversed in the obligations of their new position, such as liability for taxation, tithe-rent-charge, etc., and in the professional and technical aspects of estate administration, such as the provision and maintenance of the equipment of the land, many of these new landlords turned to the Association for advice. It is organized in county branches, with a representative General Council, and its membership approximates to 20,000.

#### THE STATE

It is only in modern times that the State has intervened to any considerable extent in the ordinary conduct of industry. Its function, broadly, is to secure justice between man and man, and with the evolution of the complex industrial state out of the primitive village community, the need for political action has been increasingly manifest. It is somewhat remarkable that farming, the most widely diffused and the least industrialized of any of the nation's major industries, should have come in for more attention from the State than the others. Early examples are provided by the Statute of Labourers, 1349, and the mass of subsequent legislation aimed at the control of wages and the retention of labour on the land sufficient for its cultivation ; the opposition of the Government to the Tudor inclosure movement, itself designed in the main to promote sheep-ranching for the wool trade for the profit of the few, without regard to the consequences to the many it dispossessed of their land in the common fields ; and later, the long succession of Acts of Parliament to regulate, by duties, both the import and the export of corn, which reacted inevitably upon the practice of husbandry.

#### *The Board of Agriculture*

In 1793 a Board of Agriculture and Internal Improvement was set up by Pitt's Government. It was not a Government

department in the strict sense, being founded by Royal Charter and financed by an annual Exchequer grant. The prime mover in its formation was Sir John Sinclair, a Scottish landowner and a Member of Parliament. King George III became the patron of the Board, which consisted of sixteen ex-officio and thirty ordinary members, a treasurer and a secretary. The ex-officio members included persons such as the two Archbishops, while the ordinary members were selected from the great landowners of the day. Sir John Sinclair was appointed first President, and Arthur Young Secretary.

Arthur Young, the son of a Norfolk clergyman, was the most remarkable agricultural writer which the country has ever known. In 1783 he had started a journal, *The Annals of Agriculture*, to which King George III himself was a contributor. At various times Young had made tours, both in this country and in Ireland, to examine the condition of farming, of each of which he published valuable reports. On another occasion he made a similar tour in France, and the publication which resulted, *Travels in France*, has become a classic. He was an ardent advocate of inclosure, though he came to realize, as this work proceeded and he could study its effects, that the efficiency it promoted was procured often at the cost of hardship and loss to many of the humbler workers in the open fields.<sup>1</sup>

The first thing which the new Board of Agriculture undertook was the preparation and publication of a series of county surveys, describing the state of agriculture and the progress of inclosure and improvement in each. The first series, published in quarto, were very unequal in their execution. Their revision was undertaken in the early years of the nineteenth century, and by 1806 a complete and authoritative issue, in octavo, had been made, which forms the basis of our knowledge of agriculture and rural improvement at this important period of the nation's history. Other work, much of it useful, was undertaken by the Board, such as an exhibition

<sup>1</sup> See p. 63 *ante*

of livestock at Aldridge's Repository in St Martin's Lane, but after some five and twenty years of activity it got into difficulties. Sir John Sinclair had retired from the Presidency in 1813, and Young's blindness compelled his resignation in 1820. The withdrawal of the Treasury grant was the final blow, and in 1822, after an attempt to continue on the basis of voluntary subscriptions had failed, the Board was dissolved.<sup>1</sup>

Following the dissolution of the Board, the administration of agricultural and landed interests, so far as the State was concerned, was diffused amongst a number of commissions—the Tithe Commission, 1836, the Copyhold Commission, 1841, the Inclosure Commission, 1845—all of which merged subsequently in the Land Commission, a separate department under the jurisdiction of the Home Secretary. The outbreak of cattle plague which swept through the country in 1865 led to the formation of the Cattle Plague Department, under the Privy Council. It became the Veterinary Department in 1870, to deal with a variety of scheduled diseases of animals. A movement for the co-ordination of all these and other activities, such as Agricultural Statistics, Woods and Forests, etc., came to a head in 1879, when a Department of Commerce and Agriculture was proposed. It was not until 1888, however, that a Bill to establish a Board of Agriculture was introduced, which was passed into law during the following year. In 1903 the Board became the Board of Agriculture and Fisheries, and the responsibilities of the Board of Trade for freshwater and sea fisheries were transferred to it. In 1909 the appointment of a Parliamentary Secretary to the Board was authorized, and in 1919 the Board was raised to the status of a Ministry.

#### *The Repeal of the Corn Laws*

The old Board of Agriculture was not concerned in the great controversy which stirred the country so deeply in the first half of the nineteenth century. This was the question of the

<sup>1</sup> The Library and some other archives passed ultimately into the possession of the Royal Agricultural Society of England.



A handwritten signature in cursive script, reading "Arthur Young". The signature is fluid and expressive, with a large, sweeping initial 'A' and 'Y'.

Plate 22 Arthur Young, 1741-1820. Secretary of the old Board  
of Agriculture, 1793



Plate 23 Viscount Chaplin. First President of the new Board of  
Agriculture, 1889  
*Photo : Elliot & Fry*

price of corn, and the struggle over the repeal of the Corn Laws represented the last stand of the landed interest against recognition of the rapidly growing importance of the nation's industrial life. Richard Cobden, John Bright and those who supported them in the agitation for repeal were convinced that England's future lay not with her rural but with her industrial population. In 1838 they had launched the Anti-Corn Law League at a great meeting at Manchester, and for the next eight years Cobden and Bright led a crusade throughout the country. The agitation was supported, of course, by the leaders of industry, who wanted cheap food for their workers so that they might keep down wages and manufacturing costs, and it appealed also to the moral sense of the humanitarians who were shocked by the distress amongst the working population in the industrial towns. In this connection it is of interest to note that conditions of life were even worse in the rural districts, where bread was the chief food of the labourer, but it seems to have been accepted then, as it was afterwards, right up to the statutory regulation of agricultural wages nearly a hundred years later, that poverty and farm work were linked of necessity.

The formation of the League was the climax rather than the start of the movement to repeal the Corn Laws. Some good harvests in the early forties postponed action, and the Prime Minister, Sir Robert Peel, himself a convinced free-trader, had to meet the almost unanimous opposition of his Tory Cabinet. A disastrous corn harvest in 1845, however, coinciding with the potato famine in Ireland, produced such distress that the Government had to give way. In 1846 the duties on imported corn were drastically cut, and a sliding scale was introduced to secure their abolition, except for a nominal duty of one shilling a quarter, by 1849. Twenty years later this also was repealed.

#### *Tithe Commutation*

Shortly before the repeal of the Corn Laws, a measure which had done much to facilitate agricultural progress, the Tithe

Commutation Act, 1836, had been passed. It substituted a cash rent-charge for the tithes taken in kind. The payment of tithes of the produce of the land to the Church, in its origins a moral obligation on all Christians, had been made a legal charge by King Edgar in the year 970. By the nineteenth century its collection in kind by the parson was a long-standing anachronism. The Act substituted annual cash payments, a rent-charge based on the average prices of wheat, barley and oats in the previous seven years. Though this commutation of an irksome practice operated on the whole to the advantage of all parties, it created difficulties in times of sharply falling prices, during which the time-lag in the downward adjustment of the seven-year average maintained the rent-charge at levels much higher than current corn prices.

Tithe and its substitute tithe-rent-charge were obviously farmers' liabilities, but, in 1891, during the great agricultural depression, the legal liability for the payment had been transferred by statute from the tenant to his landlord. At that time it is probable that some 90 per cent of the agricultural land of the country was farmed on the landlord-and-tenant system, so that farmers, as a whole, ceased to be concerned with this tax upon the produce of their land. Following the First World War, however, many large agricultural estates came on the market, and the tenants, to save their homes and their livelihood, bought their holdings. Some 40 per cent of the farmers of the country thus became owner-occupiers, and these men, reluctant landlords, found themselves liable for the payment of tithe-rent-charge. Involved, as they were, almost immediately in the slump which followed the war-time inflation of corn prices, the time-lag in the calculation of the charges postponed the compensating downward adjustment of the payments due by them to the Church.

Thus, there began a violent agitation in some parts of the country for the removal of this charge on the land. Some of the new owner-occupiers, shutting their eyes to the lawful nature of the payment, which presumably they had discounted

when they bought their holdings, repudiated the liability, and there were scenes of disorder when attempts were made to recover payments by distress. Parliament had to intervene, and after the failure of one attempt in 1925 to meet the case by an arbitrary stabilization of the charge, an Act was passed, in 1936, which abolished it altogether, and substituted a "tithe annuity," terminable by a sinking fund in eighty years. While this was the best compromise no doubt in the circumstances, the Church was deprived by it of a considerable access of income which would have followed the inflation of corn prices arising out of the First World War. But tenths of the produce of the land as the basis of the dues of the Church had long been no more than a figure of speech, while being open to objection, also, on sectarian grounds, so that the ultimate extinction of the charge should prove to be in the general interest.

#### *Settled Estates*

It must not be supposed that with the passing of protection for farming when the Corn Laws were repealed, the State was to take no further interest in the industry. On the contrary, since the middle of the nineteenth century a steady stream of legislation covering the widest possible field has been enacted in the interests of the landowner, his tenants, their men and the nation at large.

A great obstacle to farming progress was the Law of Settlement. For long years a practice had been common by which property was entailed, that is to say, was made the subject of a settlement which secured it to the eldest son, and then to his eldest son. Two generations were the limit of a settlement, but by periodical resettlements, the practice, which could not legally be made perpetual, became so in effect, each succeeding owner being no more than "tenant-for-life" and restricted in his powers of administering the property he had inherited by the terms of the settlement and common law. Thus, he could not sell any of it ; he could not grant leases to tenants which would be binding on his successor ; he could not

grant mining or building leases, nor could he mortgage the land to raise money for its improvement. The object of a settlement was to secure the integrity of an estate by preventing an heir from having the complete disposal of it, but at a time when agricultural and industrial development was going rapidly ahead, as in the middle decades of the nineteenth century, these restrictions on the powers of owners of settled estates were stumbling blocks. Tenants of an elderly landlord had no security, nor would he be likely to spend his own capital even on much-needed estate improvements, knowing that he would not recover it during his own lifetime. The development of the estate, too, in the public interest, as by opening up minerals and facilitating the housing of industrial workers, was impeded.

So, from 1856 onward to 1882, a series of Acts of Parliament was passed that aimed at freeing the tenant-for-life from the control of the dead hand, not so much for his sake as in the interests of his tenants and others. As was customary with the law of property, the freedoms granted were hedged about in the earlier Acts with so many precautions and safeguards as to be almost inoperative. By 1882, however, limited owners under the strictest family settlements were free to deal with their estates almost as if they were absolute owners, always with the proviso that any capital moneys realized by the sale of all or any parts of the settled estate were not at the disposal of the tenant-for-life, but had to be paid to the trustees of the settlement for investment for the benefit of the succession.

Shortly after the repeal of the Corn Laws, special powers for borrowing money for agricultural improvements were granted to landlords. Considerable sums were voted by Parliament, as loans, for the purposes of land drainage and reclamation, secured by first mortgages upon the land and repayable by annual instalments of principal and interest within a specified number of years. When the sums first voted were exhausted, Lands Improvement Companies were incorporated to advance money for the same purposes, and for cottage building and other works of permanence. Control of



Plate 24 Sir Daniel Hall, 1861-1932

*Photo : Kenneth N. Colling*



the expenditure was exercised by the Inclosure Commissioners until they were absorbed into the Board (now the Ministry) of Agriculture, which assumed their functions, and their certificate was needed before the inheritance could be charged with the repayment of an improvement loan.

Thus, the first objective of Government after the repeal of the Corn Laws was to free the landowner from the handicaps under which he laboured in the fulfilment of his part in the agricultural partnership. But soon it was to be recognized that his tenant, the farmer, laboured likewise under handicaps. In most parts of the country conditions of tenure offered no inducements to the farmer to do his land well and to leave it in good heart at the end of his occupation. On some estates, such as that of Coke of Norfolk, leases up to twenty-one years' duration were granted, and with this security the tenant could farm well.<sup>1</sup> On others, local or estate customs secured compensation to the tenant, at the end of his tenancy, for any improvements which he left behind. In 1848 the Government appointed a Committee, under the chairmanship of Philip Pusey, to inquire into the prevailing agricultural customs. The Committee examined witnesses from every county in England, and reported that there was no uniformity of practice ; in a few counties, such as Lincolnshire and Nottinghamshire, customs to compensate the outgoing tenant for what he left were liberal and progressive ; in others they were less so, and in others, again—Berkshire, Buckinghamshire and Oxfordshire, for example—there were none. Moreover, even where compensation by custom was established, the tenant's right to it could be excluded by his contract of tenancy, and it often was.

The Pusey Committee on Agricultural Customs recommended legislation to define an adequate scale of compensation for tenants' improvements, and to make its application com-

<sup>1</sup> Though it was said of the 21-year agricultural lease that it gave the tenant 7 years in which to get his farm into good condition, 7 years in which to farm it high and another 7 years in which to take out of it all the fertility he could.

pulsory to all tenancies. That was in 1848, but nothing was done until 1875 when the first Agricultural Holdings Act was passed.

### *The Agricultural Holdings Acts*

It has been noted that, since the repeal of the Corn Laws, the aim of land legislation had been to set the landowner free from the restrictions of settlements, and to assist him generally to play a fuller part in the development of the resources of the soil. The great agricultural depression, however, which first threatened about 1875 and lasted for a generation, destroyed both the will and the power of the landlord not only to pioneer in the development of the industry, but also to maintain the high standard of estate management and farm equipment that had characterized the previous generation. Initiative passed to the tenant-farmers, and in the period 1875 to 1908 the State was busy with the task of freeing them, in their turn, from the restrictive covenants of obsolete leases, and securing their position as the leaders, *de facto*, of the industry. A series of Acts was passed, each one adding something to the emancipation of the tenant from his landlord's control, until a position almost of dual ownership of the land was established.

The first Agricultural Holdings Act, that of 1875, was an attempt to give effect to the recommendations of Philip Pusey's Agricultural Customs Committee, which had reported nearly thirty years before on the need to provide better and more uniform compensation to the improving tenant, at the end of his tenancy. The Act provided scales of compensation for unexhausted improvements upon the basis, not of their cost, but of their value to an incoming tenant. So revolutionary, however, was the idea of any statutory interference with the landlord's prerogative that the Act was permissive, not obligatory, and most of the landowners of the country contracted out of it. But the principle of tenants' compensation was now at last conceded, and in 1883 an Act, similar in all its essentials, was passed which over-rode all customs and contracts and which could not be avoided.

Amending Acts, new Acts and consolidating Acts followed. Acts passed in 1887 and 1895 provided special compensation for allotment holders and cottage gardeners, and for market gardeners. In 1906 an Act was passed which marks an important advance in the progress of State intervention between the landowner and the tenant farmer. First, the covenants customary in the contract of tenancy dictating the course of cropping to be followed were rendered null and void, and the farmer was free to crop his land as he thought best, always provided that he kept it clean and in good heart, and that at the end of his tenancy he left it in any course which might be prescribed. Second, if the tenancy were determined for any reasons other than bad farming by the tenant, or that the landlord wanted possession for his own occupation, the tenant was to receive compensation for the loss incurred by the disturbance. Third, if the tenant's crops should be damaged by game which he had not the right to kill, he was entitled to compensation from his landlord. Fourth, the tenant was empowered to execute repairs to the holding, devolving upon the landlord under the contract of tenancy, and to recover compensation at the end of his tenancy. And the Act of 1906 made other changes to the advantage of the tenant.

A Consolidating Act was necessary in 1908. Nine years later during the First World War an emergency statute was passed, the Corn Production Act, 1917, the object of which was to stimulate arable cultivation and the growth of wheat and oats, by means of guaranteed prices, with the corollary of minimum wages guaranteed to farm workers under the operation of an Agricultural Wages Board.<sup>1</sup> The maintenance of food supplies during the war had caused the Government much anxiety, and following the end of hostilities, while this memory was still fresh, Parliament enacted the Agriculture Act, 1920, which aimed at making the principles of the emergency legislation of 1917 the permanent peace-time policy of the State. Corn prices were to be secured to farmers, the Agricultural Wages Board was to go on, and, recognizing the

<sup>1</sup> See pp. 105-7 *ante*

contribution in capital equipment which would be required of the landowners if farming were to be efficient, this Act empowered the Minister to appoint a receiver for any estate on which the administration was so inefficient as to prejudice food production. Once more a principle had been conceded—the demand for certain standards of performance both by landlord and farmer—and though the Act which embodied it was repealed almost as soon as it reached the Statute Book, it was to reappear twenty-five years later, in the legislation which followed the Second World War.

In 1923 another Consolidating Act was necessary, and this remained the Statute by which the rights and the liabilities of the landlord and the tenant-farmer were determined until modified by the Agriculture Act, 1947, one of the long series which began in 1875. In many respects it is almost the exact counterpart of the ill-fated Act of 1920, and it was introduced under economic conditions almost exactly similar—the nation emerging only barely successfully from a struggle to stave off starvation ; a farming industry stimulated to the maximum and still vital to it ; farmers unable, nevertheless, to produce at the price level without support ; landowners faced with the accumulation of estate maintenance of the six war years, and building costs inflated and still rising.

The Act was an agreed measure. It is long and complicated. Further, its various provisions come into operation not on any fixed date but by Orders in Council to be applied to each or any of them when the time is ripe. So, until the provisions for repealing the Act of 1923 are made effective, that Act continues in force. The new Act may be considered as an attempt to secure the stability and the efficiency of the farming industry :

*Stability*, by guaranteeing prices and assured markets for certain scheduled produce ;

*Efficiency*, both in estate management and in farming, under the supervision of County Agricultural Committees, with powers to the Minister to dispossess both landlords and farmers in the last resort. A new feature, however, is the appointment

of an Agricultural Land Tribunal, to which any party concerned may appeal against the Minister's decision.

An Agricultural Land Commission is to be appointed to administer or to farm the land taken over by the Minister, and there are many small but important amendments of the law, such as those affecting customary rights, compensation for tenants' improvements, compensation for disturbance, compensation to the landlord for dilapidations and the control of tenancy agreements. The Act has been hailed by the National Farmers' Union as the "Great Charter for British Agriculture," and by a well-known landowner and agricultural politician as "the *Nunc Dimitis* of the Country Squires."

Clearly the State has played important parts in the affairs, first, of the landowner and, second, of his farming tenant. It is interesting to note too, how, beginning tentatively with enabling measures of various kinds for the assistance of either party in the execution of their functions, latter-day legislation has taken a definite turn towards direction and control.

#### *Land Settlement*

Let us see now to what extent the third member of the agricultural partnership, the farm worker, has been the object of Parliamentary solicitude. His long struggle for better conditions, culminating in Government intervention for the control of agricultural wages in 1917, has already been discussed.<sup>1</sup> But long before this, State action had been taken in an attempt to mitigate the hardships of the farm worker's life, and to give him opportunities of economic advancement. This was by the provision of land for his own occupation and use, first in the form of garden and field allotments and, more recently, of part-time and full-time small holdings. So long ago as 1811 the Government had attempted, as a measure of poor relief, to provide allotments for distressed labourers. The experiment was the outcome solely of low wages and unemployment in agriculture, and it was a failure. Another attempt was made under the General Inclosure Act, 1845,

<sup>1</sup> See pp. 105-7 *ante*

which stipulated that a plot of land for field gardens for the labouring poor of the parish should be set aside upon its inclosure, and a few years later the Chartist Movement, faced with the failure of its political agitation, promoted a venture in land settlement, though not for farm workers, as the means to social security and political independence.

None of these attempts met with any permanent success, and following the failure of the Chartist venture interest in the colonization of England was not revived until 1886, when Mr Jesse Collings moved an amendment to the Address regretting that no measures had been announced in the Speech from the Throne "for affording facilities to agricultural labourers and others in rural districts to obtain allotments and small holdings on equitable terms as to rent and security of tenure." This was the famous "Three acres and a cow" movement, but although the motion brought the Government down no action was taken for another six years, when the Small Holdings Act, 1892, was passed, empowering County Councils to acquire land for small holdings if a sufficient demand were proved to exist. Only five counties attempted to operate the Act, however, and after fourteen years only 790 acres of land had been acquired by them. Following the usual course of new ventures in land legislation, the Act had been permissive only, and it was not until sixteen years later that another Act was passed, the Small Holdings and Allotments Act, 1908, which put upon the County Councils the obligation to prepare schemes for the acquisition of land for small holdings. Amongst the applicants for new holdings under the Act the proportion of landless labourers to help whom it had been passed was relatively small, most of those successful being men already occupying small acreages of land as part-time or full-time holdings, who wanted to extend their operations. In the seven years before the First World War there were some 25,000 applicants under the Act for some 380,000 acres of land, of whom 12,461 had been given holdings.

After the war, Government interest in land settlement was given an entirely new orientation. It was conceded on all

hands that land must be made available for men who had fought in the war. War scarcity and inflation had sent agricultural prices soaring, so that the outlook for soldier-settlements seemed good, and the proposal lost nothing from its strong sentimental appeal. So in 1919 was passed the Land Settlement Facilities Act, to settle ex-service men on the land. The authorities were no longer restricted in their activities by any idea that their expenditure should be controlled by the rents they could recover, for losses incurred on the provision of soldier-settlements were to be made good to the County Councils by the Treasury. Of the men thus settled 15 per cent had failed by 1925, but the County Councils had unsatisfied applicants numbering some 7,000, who had been interviewed and approved, and so in 1926 another Act was passed in a fresh but ineffective effort to speed up land settlement.

In 1931 the movement received once again a fresh orientation and a new impetus, this time through the volume of industrial unemployment of the day. More than two million men were out of work, particularly in the mining and ship-building industries, and there was strong pressure to use land settlement as a means of drawing off some of this surplus labour. Under the auspices of the Carnegie United Kingdom Trust, a Land Settlement Association was formed to select, train and settle unemployed men on the land in groups. To it the Government contributed £75,000 a year for three years, on the basis of £1 for every £1 raised by the Association from non-State sources. As an experiment the venture proved nothing, for with the outbreak of the Second World War many of the settlers hurried back to fill the demands for labour in their old trades.

Thus a hundred years had brought the question of land settlement by the State back to its starting-point. The first statutory attempt in 1819 was for the relief of much unemployment and destitution. From 1886 onwards repeated attempts to promote the closer settlement of the land had nothing to do with poverty or unemployment, but were based upon belief

in the economic stability of peasant farming and the need for an economic ladder for the agricultural worker. The last attempt, in the 1930s, repeated this experiment under circumstances resembling, otherwise, those which led to the Poor Law holdings of the early nineteenth century. Today the statutory smallholders are sharing in the general prosperity of the farming industry, but any increase in their numbers is in abeyance owing to the high cost of land and its equipment.

#### *Agricultural Education and Research*

The activities of the Ministry of Agriculture and Fisheries extend to a host of other subjects, from responsibility for the Ordnance Survey to granting certificates for the sale of virus-free strawberry runners. Amongst them the endowment of agricultural education and research is of first importance.

Education and research had been going on at one or two privately established institutions, of which the Royal Agricultural College at Cirencester, founded in 1845, and the Rothamsted Experimental Station, founded just before by Sir John Bennett Lawes, were already famous before the State took a hand. It was not until the last few years of the nineteenth century that public money was first applied to agricultural education. The Act which constituted the Board of Agriculture in 1889 authorized it to inspect and aid schools in which practical or scientific instruction in agriculture was given, the amount of the assistance being limited to £5,000 a year. Little was done by the Board, however, before 1890, when a curious chance made considerable funds available. In that year the duties on beer and spirits were increased, with the object of raising funds partly for compensation payable on the extinguishment of liquor licences, and partly for grants to local authorities for police purposes. The new duties yielded £750,000 a year, the "whisky money" as it was called, and there was so much public opposition to the liquor-licence compensation proposals that other uses had to be found for it. Accordingly it was decided to distribute it amongst the County Councils, who were authorized to use it, if they

wished, for technical, including agricultural, education, and some of them did. Meantime the Board of Agriculture applied its own funds to the promotion of higher agricultural education, leaving more technical instruction to the counties.

In 1908 the whole question of scientific and technical instruction was reviewed by a strong committee under the chairmanship of Lord Reay, and upon its report the present structure of agricultural education may be said to have been based. It recommended the creation of Farm Institutes to provide short courses for farmers' sons and farm workers as a supplement to the higher agricultural education already provided in University Departments and Colleges ; and the establishment two years later of the Development Commission, entrusted with a sum of nearly £3,000,000 for the development of agriculture and fisheries, made it possible to do this. Grants were made available to County Councils of 75 per cent of the capital cost, and up to 50 per cent of the maintenance cost of the new Institutes, leaving the balances to come out of the county rate. Thus the initiative to provide this type of agricultural education lay with the local authority, and some of them did nothing.

Agricultural teaching was not confined to Colleges and Farm Institutes. In nearly every county an Agricultural Organizer and a staff of instructors in agriculture, horticulture, dairying, poultry- and bee-keeping, farriery, etc., was appointed to visit and advise the farmers and others in the county and to organize lectures, classes and demonstrations. By the time of the First World War, therefore, a comprehensive scheme of agricultural instruction was in operation, extending from University Departments granting degrees after three-year courses, Agricultural Colleges with two-year diploma courses, Farm Institutes with short courses of six months or less, to the lectures and demonstrations and advisory services of the county staffs. So things continued until after the Second World War, when the Minister of Agriculture decided, on the recommendation of a committee presided over by Mr. Justice Luxmoore, to take over the work

of the County Agricultural Organizers and their staffs, and to centralize it under the Ministry. Thus was created the National Agricultural Advisory Service.

Instruction in agriculture, both scientific and technical, is well catered for. It was recognized, however, that the resources of the State should be used also to aid research in agricultural science if progress in the practice of farming were to be made. Stimulated by one of their number, Sir Daniel Hall, who was at that time Director of the Rothamsted Experimental Station, the Development Commissioners, in consultation with the Ministry of Agriculture, drew up a scheme in 1911, the basis of which is the organization of research by subjects. Under this scheme specialist Research Institutes for the study of each branch of agricultural science have been set up, linked, each of them, so far as possible, with one or other of the Universities. The staffs of the Institutes are not burdened with teaching, nor are they responsible for the demonstration of the results of research. They are seekers after knowledge in their subjects, that sooner or later will have its practical application.

The main subjects covered by the Research Institutes are soil and crop-production problems ; animal nutrition, breeding and pathology ; plant breeding and physiology ; parasitology ; horticultural problems ; dairying ; economics. Their work is co-ordinated by the Agricultural Research Council, a body set up under the Privy Council in 1931, working in close collaboration with the Development Commission and the Ministry of Agriculture. A system of Research Scholarships tenable at the various institutes secures the supply of trained investigators for this highly specialized work, who otherwise might be difficult to find.

In an industry of small capitalists, unable, any of them, to organize scientific and technical research after the manner of the other great industries of the country, the Agricultural Research Institutes fill a vital place in the progress and the evolution of farming. The work of Rothamsted on soils and fertilizers, of Cambridge on plant breeding, of Reading on

milk production and of East Malling on fruit, may be cited as examples of the contributions which all the Institutes are making to the advancement of good husbandry. Political action by the State may be needed from time to time in an unstable world to carry the farmer over bad patches, but continued indefinitely it can only stereotype and even sterilize his industry. History will show surely in the future just as it has in the past, that the advancement of agriculture is linked by unbreakable bonds with progress in the education of the farmer and research into the problems of his art. It is through the University Departments, the Agricultural Colleges, the Farm Institutes and the Research Stations which it endows, that the State is making its greatest contribution to progress on the land.



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